BUILDING THE LINK BETWEEN HEALTHCARE AND EDUCATION: A PROFESSIONAL DEVELOPMENT TO ADDRESS THE DISPARITIES IN SCHOOL-BASED MENTAL HEALTH SERVICES IN NEW YORK CITY

by
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Abstract

The non-treatment and under-treatment of mental illness is a pervasive issue in New York City's youth (Dixon et al., 2015; Bello et al., 2017). The referral data from the OnTrackNY clinics highlights the significant issue of teachers and school personnel not recognizing symptoms of mental illness in students, and not referring affected students to often lifesaving treatment. A review of the literature explores evidence-based clinical practices for first episode psychosis, barriers to mental health services in schools, underlying teacher, school, sociological factors to the problem, and professional development as an intervention to the problem. A mixed methods study was designed and implemented to investigate New York City school personnel's knowledge and attitudes toward early detection of student mental health concerns. A training was conducted at a Title one urban public high school in New York City. The findings from this study suggest school personnel's knowledge and attitude in assisting student with mental health concerns, and their motivation to obtain more related training, can be improved with the study's intervention. Implications for research include replicating the study with students' and families' input, and on a larger scale with multiple sites. Identifying local, state, and federal stakeholders to improve policy in school-based mental health services and resources. Identifying funding streams to implement research studies in finding sustainable solutions to issues in school-based mental health system is an urgent next step. Implications for practice include incorporating this study's intervention in pre-service teacher, teacher fellowship, and school counseling professional's trainings; adopting effective professional development approaches such as Train-the-Trainer model at individual school sites; and include specific evaluation procedures, and continuous assessments for improvements. Gaining support from education stakeholders and

policy authorities, including Mayor Bill De Blasio, the New York City Department of Education administration, and district leaders in mental health, will also be critical in implementing this intervention on a macro scale in New York City secondary schools.

Keywords: mental illness in youth, early intervention services for first episode psychosis, school mental health services, service barriers, effective professional development models

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Executive Summary

The non-treatment and under-treatment of mental illness is a pervasive issue in New York City's youth. A recent study conducted by the Center for Disease Control (2013) finds approximately five million public school students in the United States experience signs of mental illness. Yet 80% of these affected students do not receive any treatment (Anderson & Cardoza, 2016). Evidence-based early intervention treatment offers hope to young people diagnosed with mental illness, for recovery (Dixon et al., 2015; Bello et al., 2017). There is a large body of data that supports and concludes that early intervention services for psychosis not only improve clinical symptoms, but also positively improve the affected young people's lives, and help them recover from first episode psychosis (Bird et al., 2010; Penn et al., 2005; Dixon et al., 2015; Bello et al., 2017; DeVylder et al., 2014). Results from this dissertation study will have implications for research and practice in school-based mental health services and education, and help address underlying factors contributing to the non-treatment and under-treatment of mental illness in students.

The published data from the OnTrackNY clinics highlights the significant issue of teachers and school personnel not recognizing symptoms of mental illness in students, and not referring affected students to often lifesaving treatment. A review of the literature explores evidence-based clinical practices for first episode psychosis, barriers to mental health services in schools, underlying teacher, school, sociological factors to the problem, and professional development as an intervention to the problem. A mixed methods study was designed and implemented to investigate New York City school personnel's knowledge and attitude in early detection of student mental health concerns. A training on early detection of mental health

concerns in students; effective communication strategies with parents; introducing peer coaching model; establishing Professional Learning Communities and School Counseling Collaborative Team in target school community; as well as external psychiatric treatment resources was provided to school personnel at a Title one, urban high school in New York City. A total of 20 (*N*=20) respondents participated in the professional development, and a total of eight (*N*=8) respondents participated in the three focus groups.

In this study, the author administered the School Staff Knowledge and Attitude in Early Detection of Student Mental Health Concerns to respondents, pre- and post- intervention. Following the intervention, focus group respondents were asked a total of 10 questions. The author conducted three focus group interviews with a total of eight school staff that participated in the professional development, at the target High School. The author analyzed the quantitative data collected using the statistical computer analysis program SPSS. The author used an abridged transcript-based analysis to assess qualitative data (Krueger & Casey, 2009, p. 117). The author listened to the audio recording of each focus group and developed an abridged transcript of the relevant and useful portions of the discussion. The author then used the recursive abstraction technique to identify themes and categorize results (Krueger & Casey, 2009, p. 119).

The author used the collective data from this dissertation study to answer research questions and find evidence for stated hypotheses. The study results suggest respondents' attitudes were influenced by the intervention, and they were more willing to participate in additional professional development on early detection of students' mental health concerns, after the intervention. In addition, respondents' attitudes towards assisting students with mental health concerns, also improved, in the post- professional development responses.

The qualitative data suggests there is a tremendous need for counseling leadership and supervision in schools. In this case, school counseling professionals (Counselors and Social Workers) reported they were aware there is a procedure to refer students with mental health concerns to appropriate treatment, while teachers did not know this procedure. This is an opportunity to implement a peer training and coaching model such as a Train-the-Trainer model in the target school, so that school counseling professionals (Counselors and Social Workers) who will complete additional clinical professional developments, can disseminate training materials to their colleagues (teachers and other school personnel) at individual school sites (Thorning et al., 2012, Holcomb-McCoy, Gonzalez & Johnston, 2009; Shepardson & Harbor, 2004; Showers et al., 1987). The author recommends developing and implementing Professional Learning Community (PLC) at individual school sites, as well as an interdisciplinary School Counseling Collaborative Team (SCCT) for the target school community.

This research study examined identified factors contributing to the non-treatment and under-treatment of mental illness in youth. Though this study is small and requires replication, the findings showed promise in improving school personnel's attitudes toward assisting students with mental health needs. Additionally, these findings offer important insight into the complexities of bridging the gap between healthcare and educational institutions. Implications for research include replicating the study with students' and families' input. Current priorities also include: 1) closing the existing gap between policy, research, and practice in the education and healthcare landscape, and 2) identifying local, state, and federal stakeholders to improve policy in school-based mental health services and resources. Finally, identifying funding streams to implement research studies in finding sustainable solutions to issues in school-based mental

health system is an urgent next step. Research scientists in both healthcare and education must also collaborate efforts to develop more studies which identify barriers that prevent at-risk students in obtaining appropriate treatment at the onset of symptoms, and implement sustainable solutions that address these issues in their nascent stages.

Implications for practice include incorporating this study's intervention in pre-service teacher, pre-service counseling professional, teacher fellowship, and school counseling professional's training; adopting effective peer coaching approaches such as Train-the-Trainer model at individual school sites; and include specific evaluation procedures, and continuous assessments for improvements. Additionally, incorporating innovative educational technology strategies to record this intervention as a webinar, or to develop an app, are options to consider. Technology would reduce barriers in participating and receiving this information, and make the professional development more accessible to school personnel and families who are unable to attend the in-person trainings. Finally, the author will continue to work with her institutional stakeholders, as well as affiliated city, state, and federal agencies in the current professional context, in advocacy efforts with education stakeholders and policy authorities. Gaining support from Mayor Bill De Blasio, the New York City Department of Education administration, and district leaders in mental health, will be critical in implementing this intervention on a macro scale in New York City secondary schools.

Chapter 1: Problem of Practice

Schizophrenia occurs in approximately 1.1% of the population, putting 1 out of every 100 people at risk for developing the disease at some point in their lifetime. Of all the psychiatric disorders, it is often the most feared one, due to the associated debilitating symptoms of the brain disease. It is a leading source of disability worldwide (Olfson, 2014). The World Health Organization ranks schizophrenia as "more disabling than amputation of both legs, severe strokes, end-stage renal disease requiring dialysis, severe Parkinson's disease, or terminal cancer" (Olfson, 2014, p.17). The onset of schizophrenia typically occurs between 15 to 25 years of age (Armstrong, 2009, p. 2), sometimes at an even younger age, and can be a shattering and traumatic experience for the affected young people and their families. Going through a first episode of psychosis, in early stage of schizophrenia, is confusing and frightening for these young people. Furthermore, the annual cost of treatment for schizophrenia and related psychotic spectrum disorders treatment in the United States, is a staggering $155.7 billion (Cloutier et al., 2016).

In New York State, the non-treatment and under-treatment of serious mental illness (including schizophrenia) in youth has been a pervasive issue, and state stakeholders searched for a solution to improve the available treatments for these affected young people. According to the New York City Department of Health, there are an estimated 60,000 young adults in New York City with psychotic illness and 3,000 newly diagnosed cases each year. Only 40% to 50% receive psychiatric care of any kind. Without treatment, 41% of these young adults will be hospitalized repeatedly within 12 months, and develop long-term disability (Dixon et al., 2015). Individuals with schizophrenia are also at a high risk for suicide. Approximately one-third will attempt suicide and, 1 out of 10 will eventually take their own lives (Olfson, 2014, p. 18).

To address the urgent need for this epidemic, the National Institute of Mental Health (NIMH) implemented The Recovery After an Initial Schizophrenia Episode (RAISE) research project (Armstrong, 2008). RAISE was developed to "fundamentally change the trajectory and prognosis of schizophrenia through coordinated and aggressive treatment in the earliest stages of illness" (Armstrong, 2008). RAISE was designed to reduce the likelihood of long-term disability that people with schizophrenia can experience. "It aimed to help people with the disorder to lead productive, independent lives" (Armstrong, 2008). In addition, the RAISE project aimed to reduce the staggering cost of care for schizophrenia and related psychotic spectrum disorders treatment.

Literature Review of Problem of Practice

Psychosis is characterized by nine types of symptoms (Compton & Broussard, 2009). Affected individuals can experience a few or a combination of these symptoms. Compton and Broussard (2009) describe these symptoms in detail. 1) Positive symptoms of: hallucinations, delusions, paranoia, and ideas of reference (pp. 20-22); 2) negative symptoms of: anhedonia, apathy, blunted affect, emotional withdrawal, low drive or motivation, poor hygiene, slow or empty thinking or speech, slow movements, and social isolation (pp. 23-24); 3) disorganized symptoms of: derailment, loosening of associations, poverty of content of speech, and thought blocking (pp. 24-25); 4) impaired insight (p. 26); 5) cognitive dysfunction: difficulty with abstract thinking, poor attention and concentration, impaired information processing, language problems, poor memory, and difficulty with planning (pp. 26-28); 6) hostile/aggressive symptoms (p. 28); 7) catatonic and movement symptoms (p.28); 8) mood symptoms and anxiety (p. 29); and 9) suicidal thoughts (pp. 29-30). Therefore, the first episode psychosis experience

frequently derails affected young people's academic, social, and vocational growth, while developing chronic disability and dependence on long-term medical care.

Research studies have estimated the cost of schizophrenia in the United States at $32.5 billion in 1990, and $63 billion in 2002 (Essock et al., 2002). Most recent estimate of the current total annual national cost of schizophrenia is $155.7 billion (Cloutier et al., 2016). Essock et al. (2002), showed that there are many ways in which schizophrenia is associated with greater costs. First, there are the costs of treatment, which include medication. Psychiatric treatment may be offered by public, private, or voluntary sector settings, and many patients receive care in multiple places (Essock et al., 2002). In addition to treatment, case management services, vocational rehabilitation, and psychosocial clubhouses generate significant costs. Medical and surgical costs also contribute to the cost of schizophrenia treatment, because utilization of these services depends on the effectiveness of mental health care patients receive (Essock et al., 2002). Patients with schizophrenia have particularly high health care costs due to frequent relapse and are at high risk of future increased health care costs. Clinical relapse is defined as having a psychiatric hospital admission, emergency service visit, a crisis bed episode, or a medically injurious episode of deliberate self-harm (Olfson, 2014). Patients with prior relapse incurred direct mental health care costs nearly three times greater than those who had no history of relapse (Olfson, 2014). These costs include psychiatric hospital admissions, emergency services, medication management, day treatment, individual therapy, and assertive community treatment and case management services. The mean annual health care costs of recently diagnosed patients with schizophrenia who relapse within 1 year is $33,187; as compared to $11,771: the mean annual health care cost for recently diagnosed patients who do not relapse (Olfson, 2014).

The cost of schizophrenia also includes the cost of lost productivity and family burden (Chen & Lukens, 2011). Mental illnesses, Essock et al. (2002) argue, cause people to lose workdays, lose income, and often cause people to forfeit aspirations of having any employment. In addition to the productivity losses of the individual and the high rates of disability in this population, costs analysis in schizophrenia also factor in the work losses of family members, and other contributions of time and related services (Essock et al., 2002; Chen & Lukens, 2011).

Duration of untreated psychosis, in early stage of schizophrenia, has consistently predicted the prognosis of affected individuals' treatment outcome. Longer duration of untreated psychosis has been "associated with worse premorbid functioning, higher rate of schizophrenia-spectrum disorders, and younger age at onset of psychosis" (Schimmelmann et al., 2008, p.982). Evidence-based early intervention treatment offers hope to young people diagnosed with mental illness, for recovery. There is a large body of data that supports and concludes that early intervention services for psychosis and "psychosis-like experiences" (DeVylder et al., 2014) not only improve clinical symptoms, but also positively improve the affected young people's lives, and help them recover from first episode psychosis (Bird et al., 2010; Penn et al., 2005; Dixon et al., 2015; Bello et al., 2017). Clinical research on first episode psychosis supports several interventions that contribute to functional recovery. These include using low doses of psychiatric medications (Robinson et al., 2005; Harvey, 2014); on-going cognitive behavioral psychotherapy (Jackson et al., 2005); providing psychoeducation and support to patients' families (Lukens & McFarlane, 2004; Bledsoe et al., 2008); and incorporating educational and vocational support and strategies into treatment (Nuechterlein et al., 2008; Bello et al., 2017). Empirical data also suggests that early treatment programs can reduce suicidality in youth (Melle et al., 2006).

Furthermore, empirical data pinpoints the lack of school based mental health treatment and lack of school engagement in assisting youth with mental illness, are pervasive issues in secondary schools. Green et al. (2013) utilize data from the U.S. National Comorbidity Survey Adolescent Supplement (NCS-A) and the Composite International Diagnostic Interview, to investigate the relationship between student service utilization and school resources. The researchers find that schools vary significantly in the number and type of mental health services they provide (p. 506). "The median number of students per school mental health provider (school counselor, social worker, or psychologist) is 311.2," but the range is enormous, from 130.1 to 500.6 students per school mental health provider (p. 506). "The reduction of funding" for school staff other than teachers who teach core academic subjects contribute to this pervasive issue, in which school counselors are viewed by school administration as "an ineffective use of resources" (Dahir & Stone, 2009, p. 12). Despite the call by the American School Counselor Association (ASCA), Council for Accreditation of Counseling and Related Educational Programs (CACREP), Education Trust, National Office for School Counselor Advocacy, and many educational researchers (Young & Bryan, 2015), "school counselors are too often seen as ancillary to the mission of schools and are not included as an integral part of standards-based school reform" (House & Hayes, 2002, p. 249).

Although individual, group, or family counseling are provided in 88.2% of schools, only 45.3% of students diagnosed with psychiatric disorders received treatment, and 13% of students without psychiatric disorders received treatment (Green et al., 2013, p. 507). Therefore, school engagement in assisting youth with mental health concerns, is crucial in youth's treatment adherence and utilization. There is a significant need for increased school engagement and school administration's awareness and support in assisting youth with mental illness.

In addition, stigma of mental illness is pervasive in schools (Leschied et al. (2012). Students surveyed in numerous U.S. studies, identify stigma as the number one barrier to accessing mental health treatment (Moses, 2009; Elkington et al., 2012). Many students with mental illness experience stigmatization in relationships with peers, leading to friendship losses. Students also experience stigmatization perpetrated by school staff. School staff expressed fear, dislike, avoidance, and under-estimation of affected students' abilities (Moses, 2010). In a study conducted by Roeser and Midgley (1997), they find regular classroom elementary school teachers and school counseling professionals are "somewhat to very overwhelmed" by their students' mental health needs. The researchers highlight that "most teacher education programs do not include discussion of students' mental health needs" (Roeser & Midgley, 1997, p. 129). They suggest it is important to provide teachers and school counseling professionals "with tools they need to become resource brokers for students with mental health needs," and they should be educated in assisting students in finding treatment services. In addition, teachers "need to be provided with information and resources in school settings" (Roeser & Midgley, 1997, p. 127). Additional factors contributing to the problem of practice include parental opposition to school's efforts to implement preventive interventions due to community stigma towards mental illness and "the cultural, religious, or political climate of a given community" (Meyers & Swerdlik, 2003, p. 257).

Lack of social justice pedagogy and training in graduate counseling program also contribute to the problem of practice. Lyons and Bike (2013) highlight the lack of social justice training at the graduate level as a major barrier for counseling and psychology students in gaining social justice counseling and advocacy competencies. Traditional counseling theories pedagogy, such as psychoanalytic, cognitive behavioral, and person-centered theories, emphasize

"individual, family, and group interventions" and neglect to "address broader social contexts" where social injustices occur (Brubaker et al., 2010, p.89). Compounding these factors is most students report not knowing where to go for mental health treatment and find school-based mental health resources inadequate (Bowers et al., 2013). Therefore, teachers and school counseling professionals need training in social justice counseling and advocacy for their students. Participating in social justice pedagogy, allows the classroom to be transformed as "life-sustaining and mind-expanding, a place of liberating mutuality where teacher and student together work in partnership." By creating educational settings that are "fair and affirming," school staff "take a stand on social justice" (Brubaker et al., 2010, p.89). They then play a critical role in mental health service implementation, and embrace the responsibility to reduce barriers that prevent students from accessing appropriate mental health treatment.

Other confounding factors of societal stigma and discrimination towards individuals with mental illness, contribute to the non-treatment and under-treatment of mental illness in youth. Research studies indicate societal stigma against people with mental illness is widespread, and people with mental illness are frequently viewed as incompetent, violent, and responsible for their illness (Levy et al., 2014, p.200). Strong reluctance to associate, live, or work with people with mental illness is commonly reported. Major public sectors hold negative attitudes toward people with mental illness, and actively avoid social, familial, or professional contact with them (Levy et al., 2014, p. 202). Societal perception of people with mental illness as unfit or undesirable romantic partners contributes to youth's internalized stigma and experience of rejection by romantic partners (Elkington et al., 2012). These underlying societal factors, can undoubtedly color teachers' and school staff's perceptions of students with mental illness and contribute to the problem of practice.

Inappropriate incarceration of youth with serious mental illness is another serious social issue that calls for systemic reform. Many youth detained in juvenile facilities suffer from untreated or undertreated mental illness, but are incarcerated due to lack of available mental health treatment in the community. Ethnic minority youth are three times more likely to be incarcerated than white youth, are less likely to receive, and have less access to mental health treatment (Erickson, 2012). A disturbing staff report published by the City of New York, Board of Corrections (October, 2013), reveals that mentally ill adolescent inmates were often put in punitive segregation (locked inside specially designed single-occupancy cells for 23 hours daily), denied access to school and mental health treatment, and that 71% of those in punitive segregation were diagnosed as mentally ill (page ii).

The literature reviewed reflect the significant need to: develop and implement evidence-based preventive school and community resources for individuals with mental illness; provide professional development on social justice counseling and advocacy pedagogy, early detection of mental illness in students and knowledge of external psychiatric treatment services, to teachers and school staff; advocate and bring awareness to mental illness related issues; and provide psycho-education to the general public in de-stigmatizing and de-criminalizing mental illness. The literature calls for sustainable solutions to assist adolescents and youth with mental illness in schools and communities; reduce their duration of untreated psychosis and rate of developing chronic disability; and prevention from becoming institutionalized.

Affordable Care Act and the Recovery After an Initial Schizophrenia Episode Study

The Affordable Care Act was signed into law by President Barak Obama on March 23, 2010 (Rosenbaum, 2011). Although a world leader, the United States fell behind other countries in healthcare coverage for its citizens. More than one in seven Americans were uninsured in

2008 (Obama, 2016). The federal spending towards healthcare increased almost one-quarter since 1998, to 16% of the economy, yet that did not translate to better outcomes for affected patients (Obama, 2016, p. 526). Prior to 2008, our nation's health care system offered consumers "fragmented, poorly coordinated care" (McGlynn et al., 2003), that was often reactive instead of preventive, providing services to individuals only after they became chronically ill. The overall quality of care was poor, and due to high number of uninsured Americans, the healthcare system failed to keep many individuals in need of medical treatment safe. The healthcare system was also over burdened with billions of dollars in uncompensated care, including over utilization of emergency department services and delay of treating preventable health conditions (Obama, 2016).

The Affordable Care Act had five major aims. The first was achieving near-universal coverage for the American people through "shared responsibility between government, employers, and individuals" (Rosenbaum, 2011, p. 130). The second aim focused on improving the "fairness, quality, and affordability of health insurance coverage" (p. 130). The third aim was to reduce unnecessary spending, address the gap in the healthcare system for diverse patient populations, while improving the "value, quality, and efficiency" (p. 130) of healthcare. The fourth aim was to foster sustainable changes in the "availability of primary and preventive health care" (p. 140), and improve access to quality health care. The fifth aim was to invest smartly in public health, and expand evidence-based preventive care, and community investments (p. 140).

Under the momentum for healthcare reform in our nation, President Obama and his administration asked federal agencies for published scientific research findings and evidence supporting the five aims of the Affordable Care Act. These federal agencies included the National Institute of Mental Health (NIMH), Substance Abuse and Mental Health Services

Administration (SAMHSA), and the United States Department of Health and Human Services. The National Institute of Mental Health focused on implementing the Recovery After an Initial Schizophrenia Episode (RAISE) research project, which targeted treating schizophrenia at the earliest stage of the illness.

Utilizing the new federal grant from the National Institute of Mental Health, Dr. Lisa Dixon at Columbia University and New York State Psychiatric Institute, became the principal investigator to implement the Recovery After an Initial Schizophrenia Episode (RAISE) study, and tested a new treatment model focused on treating young people at the onset of psychosis symptoms. In 2008, RAISE was implemented at two sites: Columbia University Medical Center/New York State Psychiatric Institute, and the University of Maryland. RAISE aimed to improve the existing healthcare policy and clinical practice in treating early psychosis.

RAISE focused on preventive treatment in the early stage of schizophrenia, while clients are experiencing onset of symptoms during the first episode of psychosis. RAISE integrated the expertise from different professions within healthcare. The treatment model shifted the traditional approach in medicine, from a physician and medication driven model, to focusing on the whole person. The treatment model took on a Shared-Decision Making framework (Elwyn et al., 2012; Bello et al., 2017) with clients and their families, in developing recovery goals that are important and relevant to each young person's life. The physician or clinician is no longer the only expert in treatment, the treatment model views clients and their support networks as experts in their treatment also, and work closely with clients in and outside of the clinic. This treatment model fosters engagement in care, and the development of a strong therapeutic relationship between clients and their treatment teams, a key factor that was often missing in medicine.

Coordinated Specialty Care Clinics: OnTrackNY/OnTrackUSA

The RAISE research project was instrumental in changing healthcare policy and funding in the United States. It provided valuable scientific evidence for the necessity of early intervention of mental illness. The former director of the National Institute of Health, Dr. Tom Insel, ranked the RAISE project as the number one scientific discovery in 2014. Following the successful outcomes of the RAISE initiative in New York State, a first episode psychosis treatment model was established, and OnTrackNY clinics were funded. "OnTrackNY is an innovative, evidence-based team approach to providing recovery-oriented treatment to young people who have recently begun experiencing psychotic symptoms. These symptoms may include unusual thoughts and beliefs, disorganized thinking, or hallucinations such as hearing and seeing things that others don't" (New York State Office of Mental Health, 2013).

OnTrackNY integrates the expertise from different professions within healthcare. The multidisciplinary treatment team consists of psychiatrists, counselors, social workers, nurse, peer specialist, psychiatry residents, and trainees. The author provides administrative and clinical oversight to the clinic, and clinical supervision to the entire treatment team. This treatment model is person-centered, and highly individualized. It celebrates the strengths of each young person, removing the traditional medical focal point of a person's illness. Treatment team meets with clients, in all contexts of their lives, and not only restricted to services at the clinic. This includes home visits, school meetings, employer meetings, and community meetings. The treatment team also provides on-going psychoeducation and support for clients' family members and their home and community support networks.

OnTrackNY clinics have been providing free, comprehensive early intervention treatment

to young people experiencing first episode psychosis, since October of 2013. Currently there are 22 clinics in New York State, and new clinics are added each year. Many states have contracts with OnTrackUSA to develop this Coordinated Specialty Care treatment model, and provide specialized training to new treatment teams. OnTrackNY's outcome data shows a significant reduction in enrolled patients' emergency room visits, hospitalizations, substance use, and suicidality (Bello et al., 2017). There is also a significant improvement in enrolled clients' overall symptoms, occupational/educational outcomes, and social functioning (Bello et al., 2017). Most importantly, recovery from a first episode of psychosis is an attainable reality, for the young people enrolled in the program. The author's clinic was nominated and won the American Psychiatric Association's Psychiatric Services Achievement Silver Award for the 2016-2017 year.

The Affordable Care Act and the Medicaid expansion under this law played a critical role in the success of OnTrackNY. As discussed in the first part of this paper, the Affordable Care Act aimed to reduce wasteful spending, and used healthcare dollars wisely on evidence-based preventive clinical care. The Affordable Care Act removed many barriers in access to care, from the healthcare system pre- 2008. Specifically, OnTrackNY clinicians are able to break free of the traditional mode of medicine, without the constraint of what clinical services are billable or not billable, and see clients outside of the hospital or clinics, in organic settings of a client's life. How a young person presents in the clinic, is different than how he or she presents in their natural environment. By working with clients at home, in school, at work, and in the community, clinicians are able to provide hands-on behavioral skills training, and symptom management techniques to clients, as they experience psychosis symptoms. These life-saving services were not billable in the previous healthcare system, and clients were restricted to receiving a minimum

number of therapy sessions (i.e. 20 session per calendar year), and monthly medication consultation only.

Summary of Factors and Underlying Causes

Multiple government, state, and community agencies are involved in the existing professional context. These include United States Department of Health and Human Services, National Institute of Mental Health, Substance Abuse and Mental Health Services Administration, New York State Office of Mental Health, New York City Department of Health and Mental Hygiene, New York State Psychiatric Institute, Columbia University Medical Center, Washington Heights Community Services, Jewish Board of Family and Children Services, Center for Practice Innovations, Parsons Child and Family Center, Bellevue Hospital Center, Kings County Hospital, Montefiore Medical Center, Elmhurst Hospital Center, Lake Shore Behavioral Health, Northwell Health Systems, Suffolk County Hospital, Lenox Hill Hospital, Rochester Psychiatric Center, Mental Health Association of Westchester, The Institute for Family Health, Hutchings Psychiatric Center, Mercy Medical Center, Staten Island University Hospital, Center for Counseling at Walton, Access: Support for Living, Services for the Underserved, and Pesach Tikvah community agency. However, the identified gap is the lack of collaboration with schools in New York State. Of the 2,206 referrals received by the 20 full fidelity OnTrackNY clinics from 2015 Q2 to 2017 Q2, only 2% came from schools (OnTrackNY, 2017). Clients continue to primarily be referred to treatment from psychiatric inpatient units, and mental health providers. Considering the onset of psychosis most frequently occurs during adolescence and young adulthood, this coincides with secondary school and college years. This also highlights the significant issue of teachers and school personnel not recognizing symptoms of mental illness in students, not informing and facilitating

communication with parents to discuss these concerns, and not referring affected students to treatment.

Chapter II: Empirical Examination of the Factor and Underlying Causes

The OnTrackNY clinics utilize evidence-based clinical practices to treat adolescents and young adults experiencing the first episode psychosis, and the treatment outcomes have been very promising (Dixon et al., 2015; Bello et al., 2017). Multiple government, state, and community agencies are involved in the existing professional context. However, the identified gap is the lack of collaboration with schools in New York State. Clients continue to be referred to treatment from psychiatric inpatient units and other mental health providers. Only 2% of the 2206 referrals came from schools (OnTrackNY, 2017). Considering the onset of psychosis most frequently occurs during adolescence and young adulthood, this coincides with secondary school and college years. Therefore, collaboration with school leadership team and staff will facilitate referral to appropriate treatment services for students experiencing mental illness at the onset of symptoms.

Context of Study

Review of literature on existing school-based mental health services, exposes the profound gap and deficit in school-based mental health services, and lack of school engagement in assisting students with mental health needs. Additional drivers that contribute to the non-treatment and under-treatment of mental illness in youth include youth's internalized stigma, and expressed stigma towards students with mental illness in schools from peers and school staff (Roeser & Midgley, 1997; Han & Weiss, 2005; Williams et al., 2007). Entrenched societal stigma and discrimination towards individuals with mental illness is also widespread and contribute to youth not connecting to treatment at the onset of illness.

Research Questions

Interventions to the problem of practice focused on providing professional development,

on early detection of mental illness in students and knowledge of external psychiatric resources, to school personnel. In addition, school administrative teams should provide extra support to school personnel, and address low staff self-efficacy beliefs. These interventions will in turn, facilitate critical collaborations between schools and external psychiatric treatment facilities. Students with mental health concerns can then be referred to appropriate treatment services at the onset of symptoms.

The following Research Questions guided this needs assessment conducted in Year 1 of the doctoral program:

1) What are the school factors and barriers that contribute to the non-treatment and under-treatment of mental illness in youth?
2) What are the barriers in establishing collaborations with schools in New York City?
3) Would providing professional development in early detection of mental illness in students, and knowledge of external specialized treatment services, to school personnel, affect their attitude on assisting students with mental health issues and participation in on-going professional development?

The data that are needed to answer the research questions are:

1) Existing school based mental health services in New York City;
2) Procedure for referring affected students to appropriate treatment, if any;
3) Parents/caregivers' involvement in schools, and in coordinating care for students;
4) School leadership, school counseling professionals, teachers, and staff's training background in mental illness detection, if any.

Methodology

1. Description of the POP setting and study respondents

A total of six respondents participated in the needs assessment study. Respondents were school staff, recruited from attendees at the American Educational Research Association's Annual Conference in 2015. Respondents were individuals ages 25-64. 3 (50%) were female, and 3 (50%) were male. A total of three (50%) respondents identified themselves as White, 2 (33%) as Latino or Hispanic, and 1 (17%) as Asian. 3 (50%) respondents identified themselves as school administrators, and 3 (50%) as school psychologists. All respondents identified the current work setting as public schools in New York City. A total of five (83%) had a Master's degree and one (17%) had a Doctoral degree.

2. Variable used in the analysis

Twenty-two items that measured variables of knowledge and school staff attitudes, were assessed in this needs assessment. Seven were respondent demographics variables, including age, race/ethnicity, gender, current position, current work setting, type of work setting, and education. Fifteen were school staff knowledge and attitude on early detection of school mental health concerns variables, these variables were operationalized using a Likert five-point agreement/disagreement scale. The variables measured were:

- Is professional development in early detection for mental illness in students provided to counseling staff (school Counselors and Social Workers) in school,
- Is professional development in early detection for mental illness in students provided to teachers in school,
- School's leadership team's knowledge in early detection for mental illness in students,

- School's leadership team's interest in assisting students with mental health concerns,
- Counseling staff's interest in assisting students with mental health concerns,
- Teachers' interest in assisting students with mental health concerns,
- Counseling staff's clinical competency,
- Teachers and counseling staff's collaboration in assisting students with mental health concerns,
- School's collaboration with students' families to address students' mental health concerns,
- School's procedure to refer students for appropriate psychiatric treatment services,
- School's willingness to refer students with mental illness to appropriate psychiatric treatment services,
- School leadership team's knowledge of external psychiatric treatment services and resources,
- Counseling staff's knowledge of external psychiatric treatment services and resources,
- Teachers' knowledge of external psychiatric treatment services and resources,
- School staff's interest in participating in professional development on common psychiatric disorders in youth.

3. Data collection methods

The quantitative method was selected for this needs assessment. The author conducted a thorough review of literature, but could not locate an instrument other researchers have developed measuring the concepts and intended variables for this needs assessment. Therefore, due to lack of existing instrument, the author took steps to meet with school staff from target school, and Ed.D. cohort colleagues at the Johns Hopkins University School of Education, who are school staff, to develop questions and received their feedback for a survey instrument. A survey instrument with 22 items that measured variables of school staff knowledge and attitudes, and an informed consent were developed, and submitted for approval. The author received approval from Dr. Mayes to administer the survey instrument. The author followed standard study requirements and research procedures in interactions with study respondents, as stated in Soriano (2013, p. 162).

- Build rapport.
- Secure written consent.
- Provide basic information about the purpose of the study and type of information required, including the personal nature of the information sought.
- Inform respondents that participation in the study is voluntary.
- Inform respondents of possible physical, psychological, and legal risks.
- Inform respondents of the name of the person or office to contact to complain or convey concerns.
- Inform respondents of how anonymity and confidentiality will be ensured.

The author then administered the survey instrument to six attendees at the American Educational Research Association Annual Conference. The surveys were administered to respondents on April 16, 2015, and completed surveys were collected during the same day.

Findings and Discussion

The author encountered significant limitations in gaining access to target population in this needs assessment. Due to New York City Department of Education Institutional Review Board restrictions, the author was unable to gain access to a diverse sample of school leadership team, school counseling professionals, teachers, and staff from a large number of New York City secondary schools. The author was resorted to using the convenience sample selection method (nonrandom selection technique), and collected data from eligible respondents who were available to the author. Unfortunately, this sample of respondents did not represent the target population. The surveyed respondents are administrative and clinically experienced school staff working in public school settings in New York City. All of the respondents in this needs assessment are either in administrative positions or have a clinical background. In addition, the small sample size was not large enough to show statistical significance. O'Leary (2012) states that sample size should be a minimum of 30 respondents, to show statistical significance.

The author moved forward to analyze the data collected using the statistical computer analysis program SPSS. The author did not need to clean the data, because there were no missing or unclear responses from the completed survey instruments. The author then coded the quantitative data by naming the 22 measured variables, aggregated the variables by subject area, and assigned numbers to the responses. Each response was then assigned a numerical value. It

was difficult to draw conclusions from this statistical analysis due to the small sample size, and sample not representative of needs assessment's target population.

This needs assessment provided insight to the third proposed research question, in understanding the significant barriers in establishing collaborations with New York City secondary schools. The author worked with her Dissertation Advisor and Committee members in exploring options to gain access to New York City secondary schools and the target population for data collection goals in the dissertation study.

Chapter III: Intervention Literature Review

Theoretical Framework

Constructivism theories "equates learning with creating meaning from experience…and the mind filters input from the world to produce its own unique reality" (Ertmer & Newby, 1993, p. 62). The principles of this theory are that humans create meaning as opposed to acquiring it, and they build personal interpretations of the world based on individual experiences and interactions. Knowledge emerges in relevant contexts, and behavior is situationally determined. Both the learner and the environmental factors are critical to the constructivist, the interactions between these two variables creates knowledge (Ertmer & Newby, 1993, p. 63). Lev Vygotsky (1978), a Soviet psychologist and renowned constructivist states, "Speech plays an essential role in the organization of higher psychological functions" (p. 32). He proposed that in order to master behavior, children master their surroundings with the help of speech. This interaction produces new relations with the environment, in addition to the new behaviors. Vygotsky (1978) emphasized that education is the most effective in the zone of proximal development, because the zone of proximal development defines "developmental functions that have not yet matured but are in the process of maturation; human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 63). Learning is the catalyst that triggers children's internal developmental processes that are able to operate only when children are interacting and cooperating with people in their environment (Vygotsky, 1978). American psychologist Albert Bandura (1977), another prominent constructivist, developed the Triadic Reciprocity model of interaction and learning. Bandura argued that behavior, cognitive and other personal factors, and environmental influences all operate interactively as determinants of each other. What people think, believe, and feel affects how they

behave. Environmental influences can affect people apart from their behavior, and thoughts and feelings are modified through modeling, tuition, or social persuasion (Bandura, 1986, p. 25).

Based on his studies, Bandura developed the self-efficacy theory (1977), in which he states, "self-efficacy is an estimation of one's own ability to accomplish a particular goal; outcome expectancy is the belief that certain actions will result in a desirable outcome regardless of who performs the actions (JohnBull et al., 2013). Bandura (1977) argues that self-efficacy beliefs arise from and are altered through four sources: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal (JohnBull et al., 2013, p. 5). Tchannen-Moran and Hoy (2007) examined these four factors in the teaching context, and their findings support Bandura's (1977) theory. Teachers with a secure sense of self-efficacy are found to be more "open to new ideas and more willing to experiment with new methods to better meet their students' needs" (Han & Weiss, 2005). Empirical data also suggests a link between an individual's self-efficacy and the amount of effort and persistence spent on tasks. Teachers with higher sense of self-efficacy have been found to invest more efforts in new educational initiatives, including early detection of behavioral concerns in students, which in turn are more likely to experience positive outcomes with new strategies (Han & Weiss, 2005). Constructivist theories, and specifically Vygotsky's (1978) work on language as a cultural tool, and Bandura's (1977) Triadic Reciprocity model of learning and self-efficacy theory have profoundly influenced the author's own learning and in understanding the underlying factors contributing to the author's problem of practice, the non-treatment and under-treatment of mental illness in youth, as well as developing an effective, sustainable intervention to this identified pervasive problem.

The author's intervention: professional development to the target population of school personnel (school administrators, school counselors and social workers, and teachers) focused on addressing the sources of school personnel's self-efficacy. The professional development gave school personnel the opportunity to develop mastery experiences, in which they can gain confidence through practicing and performing learned skills and through experiencing success in a particular task, such as identifying students showing symptoms of mental illness and referring them to appropriate psychiatric treatment clinics. The professional development included vicarious experiences involving observation of peers engaging in the learned skills, and succeeding at these tasks. The author has collaborated and coordinated treatment for a student, with the Social Work team at the target school. Therefore, the school Social Work team members can serve as peer trainers for their colleagues. The author also used verbal persuasion, and relate to the school personnel that they can play a major role in early detection of mental illness in their students, and in referring affected students to specialized treatment services. The author articulated that early intervention of mental illness saves lives. Finally, the author incorporated a discussion of coping skills and strategies in managing stress and other physiological arousal and responses that school personnel can experience in taking on new initiatives and responsibilities.

Intervention Literature

Interventions to the problem of practice focused on providing professional development, on early detection of mental illness in students and knowledge of external psychiatric resources, to teachers, school counseling professionals (school counselors and social workers), and administrators. The professional development integrated social justice counseling and advocacy competencies, transformational, and school counseling leadership practices into training materials. The training materials will help school personnel gain "an in-depth awareness and

working knowledge of oppression and its impact on human development" (Ratts, 2009, p. 163). Understanding oppression and the "isms": such as racism, sexism, classism, ableism, etc., and how these exist at the individual, social/cultural, and institutional levels will enable school personnel to not only help their students on a microlevel (individually), but also at the mesolevel (in students' homes, neighborhoods, and communities) and macrolevel (advocacy work to address social policies, legislation, and laws) (Ratts, 2009).

Researchers and policy makers have emphasized the importance of "professional development as a key component in nearly every education improvement plan" (Guskey, 2003; Shepardson & Harbor, 2004). The No Child Left Behind Act of 2001 highlights the importance of "high quality professional development to guarantee that all teachers are highly qualified" in supporting all students' academic achievement (Guskey, 2003, p. 4). Guskey (2003) reviews the characteristics of effective professional development, by assessing data published by various researchers and research agencies, teacher associations, national education organizations, and the U.S. Department of Education. He finds the most important characteristic of effective professional development as the "enhancement of teachers' content and pedagogic knowledge". Helping teachers develop content knowledge and the ways students learn contents that are taught are critical dimensions of effective professional development (p. 9). In addition, another identified characteristic is the "promotion of collegiality and collaborative exchange" (p. 12). It is important that all educators get opportunities to collaborate, exchange ideas, share strategies and expertise, and continually reflect on their practices. Other education researchers found that professional development programs are effective in "changing teachers' knowledge and practice" (Shepardson & Harbor, 2004, p. 474) if they are designed to actively engage teachers and "model appropriate inquiry interact" (p. 474) with teaches as learners, rather than only as passive

information recipients. Garet et al. (2001) found additional factors that enhance the effectiveness of professional developments. These include: 1) time span and contact hours influenced teachers' active learning in professional development experiences; 2) active learning enhanced teachers' knowledge and skills; 3) activities that emphasized content that were connected to reform efforts enhanced teachers' knowledge and skills; 4) enhanced knowledge and skills were likely lead to change in teacher practices; and 5) the coherence of the professional development program influenced the likelihood that teachers changed their practice (p. 925).

Education researchers also highlight that professional development must include specific evaluation procedures, and continuous assessments are necessary for improvements. Stakeholders' demands for accountability in professional development also contribute to the need for measuring and evaluating intervention outcomes (Guskey, 2003; Loucks-Horsley et al., 1998). Guskey (2003) argues that professional development must align with other reform initiatives, and is comprehensive and systemic in nature. Other studies have also supported consultants providing school-based professional development to teachers in improving students' behavioral outcomes. Sterling-Turner et al. (2002) find utilizing Behavioral Consultation (BC) where a school psychologist assists and provides direct training to teachers was superior to indirect training strategies, and resulted in higher treatment integrity, as well as better student behavior outcomes in the classroom. This study informs the proposed professional development, in that it should be implemented directly to the target population at the school site, to ensure fidelity and integrity. In another study, Kealey et al. (2000), clinicians from the Fred Hutchinson Cancer Research Center, included teacher motivation components in their teacher training study to promote effective implementation of a school-based tobacco use prevention program. The researchers incorporated multiple behavioral strategies aimed to motivate teachers, so that they

would want to teach the smoke prevention curriculum. The professional development included a video presentation about the Fred Hutchinson Cancer Research Center, its work, and its role in the community. Kealey et al. (2000) "emphasized the teachers' partnership with the FHCRC and how their role as curriculum providers" contributes to the center's mission. By building personal rapport and promoting team formation with the teachers, they helped generate interest in the health issues associated with adolescent tobacco use. The researchers argue, "when teachers feel that they are perceived as valuable agents for effecting importance change in their communities," they were more motivated to implement the curriculum. In addition, the school staff appreciated limiting the professional training to one day on school time, and attributed this to the successful implementation of a statewide school-based smoke prevention program.

Peer Coaching—Train-the-Trainer Model

Other studies found that expert or peer coaching provides the necessary social support to ensure teachers' change in practice (Holcomb-McCoy, Gonzalez & Johnston, 2009; Shepardson & Harbor, 2004; Showers et al., 1987). A strategy known as Developing Professional Developers and also as Train-the-Trainer, is an effective teacher training approach that involves experiences of: "building skills and knowledge needed to create learning experiences for other educators, including design of appropriate professional development strategies; presenting, demonstrating, and supporting teacher learning and change; and understanding in-depth the content and pedagogy required for effective teacher and learning of students and other educators" (Loucks-Horsley et al., 1998, p. 44).

Thorning et al. (2012) conducted a cross-national training for social workers in Kazakhstan, utilizing a Train-the-Trainer (TTT) model. In a Train-the-Trainer model, professionals disseminate training materials to trainers who in turn disseminate this information

to their colleagues (Thorning et al., 2012). In this study, five Demeu staff from the core Astana training team collaborated with the New York team. The New York team included two full-time social work professors with extensive experience in direct and cross-systems social work practice, a Director of a Social Work Department at a major psychiatric teaching hospital in New York City, and a social work doctoral student. The first phase of this study took place in Astana over a five-day period, in July 2005. The New York and Astana teams developed 10 curriculum modules. The New York team and Volunteer Services Overseas (VSO) social workers conducted the initial training. A follow-up five-day training was conducted in New York City in October 2015. Eight months after the follow-up training, the five Kazakh trainers conducted a five-day training at Demeu for 19 participants. The author studied this Train-the Trainer model, to guide the design of the professional development intervention, as well as future interventions on a larger scale in New York City's secondary schools. From this review of the characteristics of effective professional development, the author is able to conceptualize and develop the professional development intervention, for seamless delivery to target school staff, based on the most consistently noted effective characteristics.

Professional Learning Communities and School Counseling Collaborative Teams

The professional development also focused on a discussion of school counseling leadership skills utilizing the Four Framework Approach (Dollarhide, 2003), the distributed leadership model (Janson, Stone & Clark, 2009), and employing the structure of professional learning communities (PLCs) as "a framework for developing school counselor leadership" through implementing school counseling collaborative teams (SCCTs) (Young, Millard & Kneale, 2013, p. 254). This portion of the professional development demonstrated how school counseling professionals can transition their role as "a supplemental service provider to a

valuable partner in the instructional environment" (Young & Bryan, 2015). Four framework approaches of structural leadership, human resources leadership, political leadership and symbolic leadership components, as well as the distributed leadership model components were discussed.

Dollarhide (2003) discusses the need for school counselors to function as leaders of their counseling programs (p. 304). Dollarhide (2003) suggests applying Bolman and Deal's four leadership contexts to school counseling. She proposes in the structural leadership context, school counselors need to build and implement effective comprehensive school counseling programs. In the human resource leadership context, Dollarhide (2003) argues school counselors would lead "via the activities of believing in people and communicating that belief, being visible and accessible, and empowering others" (p. 307). In the political leadership, Dollarhide (2003) discusses the importance of school counselors learning the assessment of distribution of power within the building and district, building relationships with key stakeholders, and develop skills in persuasion and negotiation. Lastly, in the context of symbolic leadership, Dollarhide (2003) calls for school counselors to lead by developing a relationship with their community (students, parents, school professionals), act as "effective models" to meet the needs of all students and "inspiring others to follow their example" (p. 307). Integrating these leadership contexts in school counseling into the professional development, articulated the importance of school counselors' leadership role in building and developing comprehensive school counseling programs, as a starting point to address the severe deficit in school-based mental health services in New York City secondary schools.

Janson, Stone & Clark (2009) propose a distributed leadership model for school counselor leaders. The school counselor leadership practices through the distributed leadership

perspective highlight leadership practices that are distributed among multiple leaders, and as a developmental and teaming process, rather than an individual educator's undertaking (Janson, Stone & Clark, 2009, p. 104). The researchers argue that school counselors' "specialized training and skill set in coordination of services, consultation, communication, group dynamics, advocacy, systems, and multiculturalism" position them as ideal leaders in a school context. The principal should still be a key leader in school, however, many scholars recommend that "the school counselor and principal can enhance one another's influence" (Janson, Stone & Clark, 2009, p. 104). The distributed leadership approach suggests that leadership practices take place among two or more leaders, and emphasizes the importance of collaboration amongst these leaders. In this perspective, collaboration is seen as the "how" of leadership itself. "Leadership is enacted and evolves" through these collaborative interactions, and the practice of collaboration should be emphasized in school counselor training and practice. School counselors also need to understand the context of each individual school well. These include the complexity of social interactions amongst all school stakeholders, the building and district institutional structures, and routines of the individual schools (Janson, Stone & Clark, 2009, p. 104). Including the distributed leadership model for school counselor leaders in the professional development, deepened the target school staff's understanding of school counselors' roles and importance of collaboration in addressing their students' mental health needs.

Young and Bryan (2015)'s study of the School Counselor Leadership Survey (SCLS) identify a five-factor model of school counseling leadership dimensions. These five dimensions include: interpersonal influence, systemic collaboration, resourceful problem solving, professional efficacy, and social justice advocacy (Young & Bryan, 2015, p. 10). The five dimensions model has significant training implications for both pre-service instruction in school

counseling graduate programs and for practicing school counselors. Applying the SCLS five dimensions model can "increase counselor-in-training dispositions to enter the profession prepared as first year systemic change agents," and help practicing school counselors "strengthen leadership skill sets" (Young & Bryan, 2015, p. 13) in helping all students achieve academic success and social emotional wellbeing.

The ASCA (2012)'s framework "for school counselors to build data-driven comprehensive school counseling programs…and meeting the needs of all students through collaborative dialogue with parents and guardians, administrators, and community members" serves as a spring board for providing the proposed intervention to the target school community. The author integrated the six characteristics of a PLC into the proposed professional development. These include: 1) shared mission, vision, values, and goals, 2) collaborative teams that share a common purpose, create momentum, and drive improvement, 3) collective inquiry, 4) action orientation, 5) commitment to continuous improvement, and 6) results orientation (Young, Millard & Kneale, 2013, p. 255). The author conveyed the importance of developing a PLC, and recommended an interdisciplinary SCCT for the target school community. In this context, school counseling professionals are able to partner with other student support educational professionals and community partners, such as author's clinic at New York State Psychiatric Institute and Columbia University Medical Center.

School Leadership Support in Effectiveness of Professional Development

The effectiveness of professional development is influenced by school characteristics (Showers et al., 1987; Shepardson & Harbor, 2004). School leadership's support will impact the successful implementation of professional developments (Shepardson & Harbor, 2004). School administrative team at the target school provided extra support to school counseling

professionals and teachers during the professional development period, to ensure successful implementation and utilization of learning materials. Scholars emphasize the importance of principals creating a culture that allows school counseling professionals' collaboration to thrive, and ensure they have access to essential resources and supports (Young, Millard & Kneale, 2013, p. 264). Principals will need to work with school counseling professionals in minimizing their non-counseling related responsibilities, ensuring that school counseling professionals have the time to engage and participate in collaborative teaming, and encourage buy-in from all school staff to ensure school counseling professionals have the time to participate in SCCT meetings. In the interdisciplinary SCCT model, principals will also need to advocate for school counseling professionals, to ensure buy-in with colleagues, since the collaboration will involve collaborations with internal and external stakeholders (Young, Millard & Kneale, 2013, p. 265).

Priorities include considering the mission, vision, values, resources of existing professional context, and facilitating communication and knowledge exchange with schools and community. Research suggests that school staff is "in the best position to identify and refer children experiencing educational, psychosocial, or health-related difficulties" (Meyers & Swerdlik, 2003, p. 258). Schools not referring affected students to appropriate treatment services, contribute to the pervasive issue of non-treatment and under-treatment of mental illness in youth. Therefore, collaboration with school leadership teams, school counseling professionals, and teachers will facilitate referral to appropriate treatment services for students experiencing mental illness at the onset of symptoms.

Chapter IV: Intervention Procedure and Program Evaluation Methodology

The author developed a professional training for school personnel on early detection of mental health concerns in students; effective communication strategies with parents; introducing peer coaching model; establishing Professional Learning Communities and School Counseling Collaborative Team in target school community; as well as external psychiatric treatment resources in New York City (See Appendix A). The proposed intervention was conceptualized from the published data from the OnTrackNY clinics, and a thorough review of the literature. The author submitted the dissertation study proposal to the New York City Department of Education Institutional Review Board and the Johns Hopkins University Homewood Institutional Review Board for approval. The author received approval from New York City Department of Education Institutional Review Board on November 30, 2016 (See Appendix B), and approval from Johns Hopkins University Homewood Institutional Review Board on December 19, 2016 (See Appendix C). The author went to the target school in the first week of January of 2017, and posted recruitment flyers in the school's staff lounge. The author received permission from the target school's principal, and proceeded with the professional development on February 1, 2017. Focus groups were held on February 1, February 6, and March 2, 2017, at the target school.

Research Design and Logic Model: Hypotheses and External Factors

Based on OnTrackNY's published data and literature review, the author's hypotheses are: 1) Pre-service school personnel and school personnel do not receive or receive limited training on how to assist students with mental health concerns. (Roeser & Midgley, 1997); 2) School personnel are not recognizing symptoms of mental illness in students (Roeser & Midgley, 1997; Han & Weiss, 2005); 3) School personnel are not informing and facilitating communication with parents to discuss mental health concerns (Williams et al., 2007); 4) School personnel are

uninformed of available external psychiatric treatment resources (Roeser & Midgley, 1997; Williams et al., 2007); and 5) The proposed intervention would improve school personnel's knowledge of external treatment resources and their attitude toward assisting students with mental health needs. External factors that are out of the author's control and impacted proposed outcomes include recruitment difficulties and lack of school staff participation in the proposed professional development.

Methodology

A total of 20 (*N*=20) respondents participated in the professional development, and a total of eight (*N*=8) respondents participated in the three focus groups. Respondents (*N*=20) were school staff at a Title 1 New York City public high school. Respondents were individuals ages 18-54 (Figure 1). Ten (50%) were female, and ten (50%) were male (Figure 2). A total of ten (50%) respondents identified themselves as White, five (25%) as Latino or Hispanic, four (20%) as African American, and one (5%) as Multi-racial (Figure 3). Three respondents identified themselves as school administrators (15%), five as school counselors or social workers (25%), eleven as teachers (55%), and one as other (5%) (Figure 4). All respondents identified their current work setting as the target school. A total of 18 (90%) had a Master's degree and two (10%) had a Bachelor's degree (Figure 5).

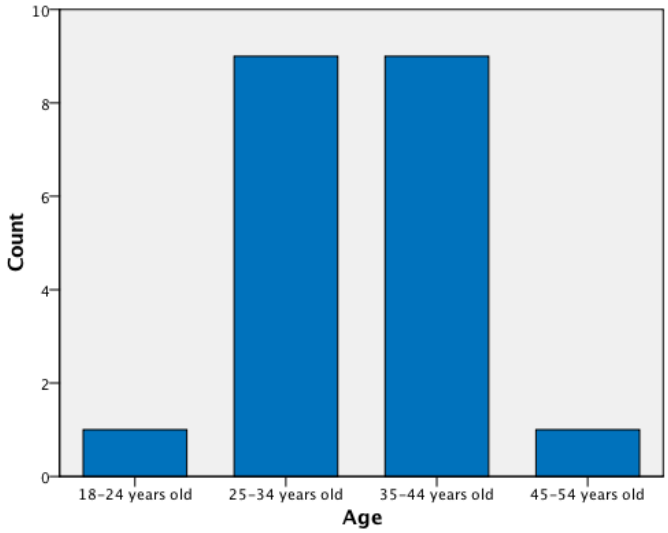

FIGURE 1 Respondent Age

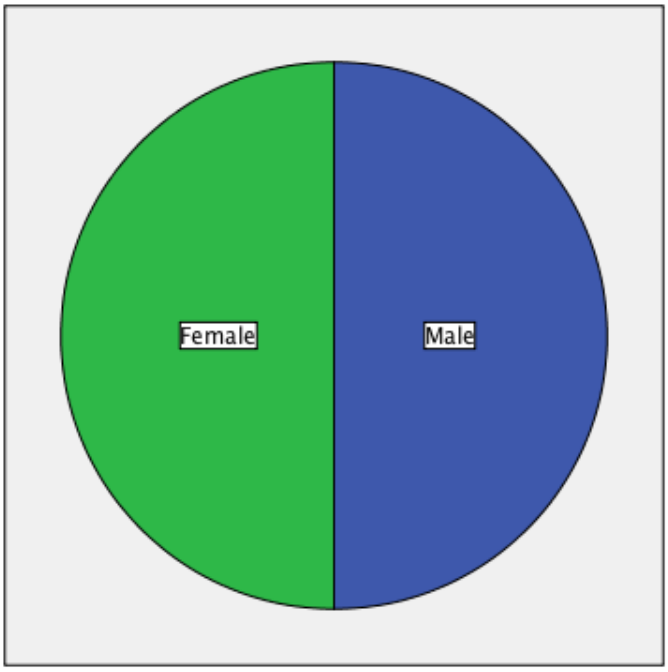

FIGURE 2: Respondent Gender

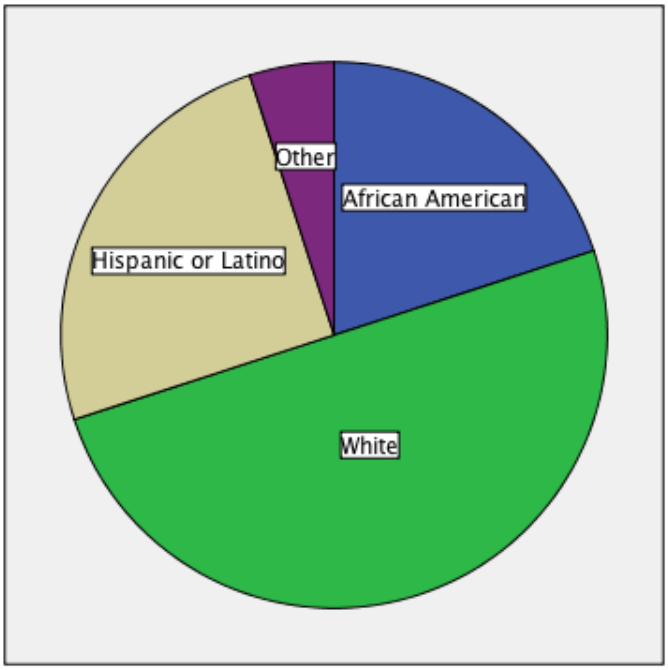

FIGURE 3: Respondent Race/Ethnicity

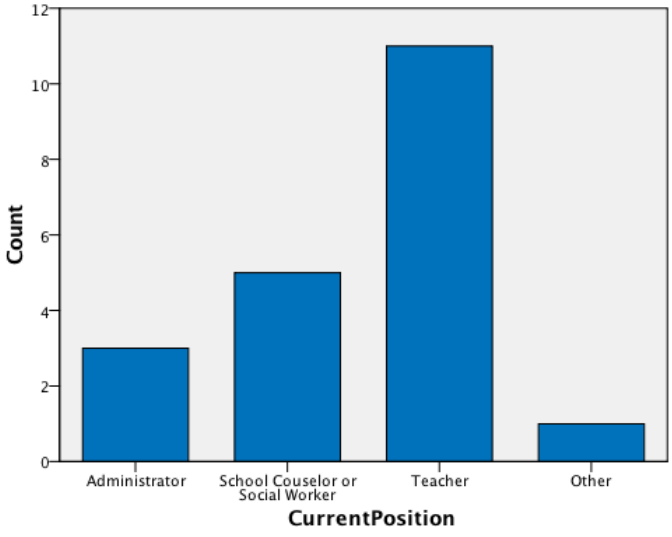

FIGURE 4: Respondent Occupation

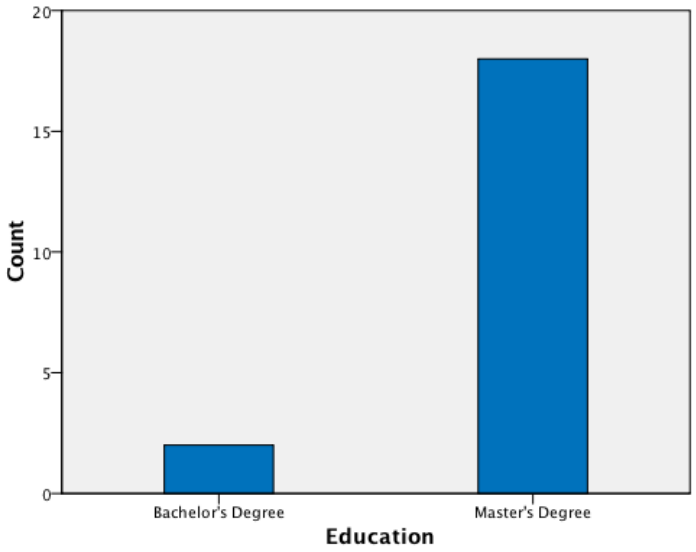

FIGURE 5: Respondent Education

Measures, Instrumentation, and Procedure

In the quantitative portion of this dissertation study, the author administered the School Staff Knowledge and Attitude in Early Detection of Student Mental Health Concerns, developed by the author (Appendix D) to respondents, pre- and post- intervention. The author conducted a thorough review of literature, but could not locate an instrument other researchers have developed measuring the concepts and intended variables for this study. Therefore, due to lack of existing instrument, the author took steps to meet with school staff from target school, school staff attendees of the American Educational Research Association's Annual Conference in 2015, and Ed.D. cohort colleagues at the Johns Hopkins University School of Education, who are school staff, to develop questions and received their feedback for this survey instrument. Twenty-two items that measured variables of school staff knowledge and attitudes were assessed in the quantitative portion of this dissertation study. Seven were respondent demographics variables, including age, race/ethnicity, gender, current position, current work setting, type of

work setting, and education. Fifteen were school staff knowledge and attitude on early detection of school mental health concerns variables; these variables were operationalized using a Likert five-point agreement/disagreement scale. This Likert scale consists of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

In the qualitative portion of this dissertation study, focus group participants were asked a total of 10 questions. The author conducted three focus group interviews with eight school staff that participated in the professional development, at the target high school. Each focus group was conducted for 60 minutes. The author asked focus group participants 10 questions, which included: "What are the barriers in working with students experiencing signs of mental illness?" "Has your experience from the professional development impacted your feelings and actions towards working with students experiencing signs of mental illness in any way? Why or why not?" and "How do you feel about participating in additional training in working with students with mental health concerns? How do you feel about working with students experiencing signs of mental illness?" (See Appendix E for a full list of questions).

Intervention

The activities for the intervention was one session of professional development that took place on February 1, 2017, provided to the target population: 20 school staff (teachers, school counselors, and administrators) at the target school, a New York City Title one public high school, located in Manhattan. The professional development intervention was a one-day, and one-session training, and took three hours to complete. The respondents received a full explanation of the experimental procedure prior to giving consent. Respondents were informed they can leave the professional development at any point, and completing the survey, as well as participating in the focus group will be completely voluntary, and they can leave at any point.

The author then distributed the study consent form (Appendix F), and collected signed consent forms.

The professional development consisted of three parts. Part One started with an introduction from the author, followed by an NPR video based on the 2013 Centers for Disease Control and Prevention's study on American children's mental health (Anderson & Cardoza, 2016), so participants could understand the mental health crisis in public school children in our nation, and scope of this issue. The author then presented a comprehensive description of the following psychiatric disorders, which have onset in adolescence and young adulthood: Psychosis and Schizophrenia, Bipolar Disorder, and Major Depressive Disorder. The professional development also included a discussion of observable symptoms of the disorders. Part One also provided the background and context to the importance of early intervention treatment of mental illness in youth. The Recovery After an Initial Schizophrenia Episode (RAISE) research project was presented. The scientific data from RAISE and information regarding the implementation of a first-episode psychosis treatment model and clinics, OnTrackNY, was included in this section. OnTrackNY clinics' published outcome data was presented to highlight the importance of early intervention, in this section of the professional development.

Part Two of the professional development focused on communication strategies in facilitating conversations with parents on mental health concerns in students. The author presented the Shared-Decision Making framework (Elwyn et al., 2012) in working with parents, and strategies on providing psycho-education to parents, emphasizing the paramount importance of family engagement and involvement in early intervention treatment. This part also included how to obtain consent from parents to refer affected students to appropriate psychiatric

treatment. Additionally, this part included a discussion of developing Social Justice counseling and advocacy competencies in working with the school's student body, which is 98% minority (67% Latino or Hispanic, 27% Black, and 2% Asian), with 72% of the students receiving free lunches and living in poverty. The author discussed the importance of developing a professional learning community (PLC) at the target school, and recommended an interdisciplinary school counseling collaborative team (SCCT), in order to better serve the school's student body.

The final part of the professional development included a detailed description of the school process for referring affected students to psychiatric treatment, after obtaining the appropriate consent from parents. This part included information and the referral process for specialized treatment programs at the New York State Psychiatric Institute, Columbia University Medical Center, New York State Psychiatric Institute, Mount Sinai Medical Center, Mount Sinai St. Luke's Hospital, and Northside Center for Child Development. Contact information for the author, Nannan Liu, Program Director of the OnTrackNY Clinic at the New York State Psychiatric Institute and Columbia University Medical Center, was included in this part of the professional development.

Data Collection

The author administered the School Staff Knowledge and Attitude in Early Detection of Student Mental Health Concerns, a survey instrument developed by the author for her needs assessment in the Research Methods and Systematic Inquiry I course at Johns Hopkins University, to the target population of 20 school staff at the target school, pre- and post-professional development delivered on February 1, 2017.

Following the professional development seminar, the author conducted three focus group interviews with a total of eight school staff that participated in the professional development, at

the target school. The focus group interviews took place on three school days in February and March 2017.

Data Analysis

Twenty-two items that measured variables of school staff knowledge and attitudes, from the School Staff Knowledge and Attitude in Early Detection of Student Mental Health Concerns survey, were measured and assessed. Seven are respondent demographics variables, including age, race/ethnicity, gender, current position, current work setting, type of work setting, and education. Fifteen are school staff knowledge and attitude on early detection of school mental health concerns variables. These variables were operationalized using a Likert five-point agreement/disagreement scale. This Likert scale consist of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The author analyzed the data collected using the statistical computer analysis program SPSS. The means and standard deviations were computed for each item in SPSS (Table 1).

Descriptive Statistics in the Total Sample (N=20)

	Total (*N*=20)	Minimum	Maximum	Mean	SD
Age	20	1.0	4.0	2.500	.6882
Race	20	1.0	7.0	3.800	1.6092
Gender	20	1.0	2.0	1.500	.5130
Current Position	20	1.0	5.0	2.550	.9455
Education	20	6.0	7.0	6.900	.3078
Pre-PD 1.1	20	1.0	4.0	2.750	.9105
Pre-PD 1.2	20	1.0	4.0	2.300	.8645
Pre-PD 1.3	20	1.0	5.0	3.550	.9445
Pre-PD 1.4	20	3.0	5.0	4.350	.5871
Pre-PD 1.5	20	3.0	5.0	4.650	.5871
Pre-PD 1.6	20	2.0	5.0	3.900	.9679
Pre-PD 1.7	20	4.0	5.0	4.350	.4894
Pre-PD 1.8	20	3.0	5.0	4.400	.6806
Pre-PD 1.9	20	3.0	5.0	4.050	.7592
Pre-PD 1.10	20	3.0	5.0	3.850	.8127
Pre-PD 1.11	20	3.0	5.0	3.950	.7592
Pre-PD 1.12	20	1.0	5.0	3.250	.8507
Pre-PD 1.13	20	2.0	5.0	3.700	1.0809
Pre-PD 1.14	20	1.0	4.0	2.250	.9105
Pre-PD 1.15	20	2.0	4.0	2.750	.7864
Post-PD 2.1	20	2.0	5.0	3.600	.8826
Post-PD 2.2	20	2.0	5.0	3.150	.8127
Post-PD 2.3	20	1.0	5.0	3.550	.9445
Post-PD 2.4	20	3.0	5.0	4.350	.5871
Post-PD 2.5	20	3.0	5.0	4.650	.5871
Post-PD 2.6	20	3.0	5.0	4.300	.6569
Post-PD 2.7	20	4.0	5.0	4.350	.4894
Post-PD 2.8	20	3.0	5.0	4.400	.6806
Post-PD 2.9	20	3.0	5.0	4.050	.7592
Post-PD 2.10	20	3.0	5.0	3.850	.8127
Post-PD 2.11	20	3.0	5.0	3.950	.7592
Post-PD 2.12	20	1.0	5.0	3.250	.8507
Post-PD 2.13	20	3.0	5.0	4.150	.7452
Post-PD 2.14	20	1.0	5.0	3.050	.9445
Post-PD 2.15	20	4.0	5.0	4.500	.5130

Table 1: Pre- and Post- Professional Development Survey Data

A *t*-test was conducted for question 6 and question 15, where respondents' answers for the pre- and post- professional development answers were computed (Table 2). Data from question 6 was selected because the author wanted to assess changes, if any, in teachers' attitude in assisting students with mental health needs. The mean for the paired differences is 0.4, and *SD*=0.50. The *p*-value for question 6 is 0.002 (Table 2), which is statistically significant. Data from question 15 was selected because the author wanted to assess whether the intervention influenced respondents' attitude towards participating in additional professional development. The mean for the paired differences is 0.4, and *SD*=0.50. The *p*-value for question 15 is <0.001 (Table 2), which is statistically significant. The *t*-test for question 6 suggests teachers' attitude towards helping students with mental illness improved after the intervention. The *t*-test for question 15 suggests that respondents were influenced by the treatment, and were more willing to participate in additional professional development on early detection of students mental health concerns after the intervention.

Paired Samples Test

	Mean	SD	Sig. (2-tailed)
Pair 1: Post-PD 2.15 & Pre-PD 1.15	1.7500	.4443	< .001
Pair 2: Post-PD 2.6 & Pre-PD 1.6	.4000	.5026	.002

Table 2: *p*-values for Paired Samples Test

Qualitatively, the author employed a focus group interview methodology. The author examined constructs of school staff's knowledge of mental illness, attitude, and level of self-efficacy toward working with students showing signs of mental illness. Considering the realities of time and budget, the author used a single-category design to conduct three focus groups with the target population (school staff at the target school) that completed the proposed professional development. Three focus groups were held because the ideal design for a focus group is to reach the point of theoretical saturation, where the author is no longer gaining new insights (Krueger & Casey, 2009). The respondents received a full explanation of the experimental procedure, including that the focus groups will be audio recorded, prior to giving consent. Respondents were informed participating in the focus group is completely voluntary, and they can leave at any point. The author then distributed the study consent form (Appendix F), and collected signed consent forms.

The sessions were tape-recorded. The author followed a prescribed, sequential process so that findings reflect what was shared in the group (Krueger & Casey, 2009). The author ensured the analysis is verifiable if another researcher is able to arrive at similar findings using the same forms of data. The data collection and analysis are concurrent during this process. The author used an abridged transcript-based analysis to assess this data (Krueger & Casey, 2009). The author listened to the audio recording of each focus group and developed an abridged transcript of the relevant and useful portions of the discussion. The author then used the recursive abstraction technique to identify themes and categorize results (Krueger & Casey, 2009). During this process, the author followed the six steps in recursive abstraction to examine specific factors such as frequency, specificity, emotion, and extensiveness of comments and themes. In step one, the author used the same interview questions and applied to each respondent with their answers

being recorded and written up into a transcript. Everything of interest is highlighted. In step two, the author transferred the highlighted data into a table with the question topics on the left (vertical axis) and a column per respondent across the top (horizontal axis). In step three, the author paraphrased the data to make it more concise and manageable, while keeping respondent's original comment. In step four, the author combined questions on similar topics to form themes. In step five, the author coded the remaining responses for each respondent. In the final stage, the author grouped control data of respondents' occupation, in this case, school counseling professionals and teachers. The author looked for patterns in the responses. Patterns were thus identified, and the author wrote a descriptive summary for each theme.

Chapter V: Findings and Discussion

Process of Implementation

The inputs and resources required to create the activities for the proposed intervention included human resources of time and financial resources. Considering the proposed intervention took outside of the author's workplace, she needed approval from New York State Psychiatric Institute/Columbia University Medical Center for time off to conduct the study during regular business hours. The author was approved for time off to conduct the study in February of 2017. The author applied for a grant with the American Mental Health Counselors Association, and was a finalist for the 2017 American Mental Health Counselors Association Foundation Dissertation Research Scholarship Award. Developing a partnership with the target school administration was critical for the successful implementation of this proposed intervention. The author met with the high school administrative team twice in the fall of 2015, and continued to collaborate with them throughout the academic years of 2016 and 2017. However, due to New York City Department of Education's Institutional Review Board's restrictions, the author was not allowed to attend a staff meeting or PTA meeting at the target school, to conduct additional needs assessments and gain support from school staff and parents.

The planned activities for the proposed intervention was one session of professional development that took place on February 1, 2017, provided to target population: 20 school staff (teachers, counselors, and administrators) at the target school, a New York City Title one public high school, located in Manhattan. The professional development was a one-day, one-session training which took three hours to complete.

Findings

The author was able to answer the research questions that guided the development and implementation of this study, utilizing the study's findings. For research question 1: What are the school factors and barriers that contribute to the non-treatment and under-treatment of mental illness in youth? **Hypothesis 1: Pre-service school personnel and school personnel do not receive or receive limited training on how to assist students with mental health concerns.** The quantitative data highlights that professional development in early detection for mental illness in student is not offered to teachers or counseling staff. The mean for question 1 from the survey is 2.75 (*SD*=0.91), and the mean for question 2 from the survey is 2.3 (*SD*=0.86). Additionally, the quantitative data suggests teachers are not knowledgeable about external psychiatric treatment services and resources. The mean for question 14 from the survey is 2.25 (*SD*=0.91). This data provides evidence for **Hypothesis 4: School personnel are uninformed of external psychiatric treatment resources.** The quantitative data was also revealing in that respondents' interest and motivation to participate in professional development to better assist students with mental health needs was low, the mean for question 15 from the survey is 2.75 (*SD*=0.78), prior to the intervention, and *M*=4.5, *SD*=0.51, post- intervention. This data provides evidence to support **Hypothesis 5: The proposed intervention would improve school personnel's knowledge of external treatment resources and their attitude toward assisting students with mental health needs.**

The qualitative data also helped answer this research question and provided additional evidence to buttress the author's hypotheses. The advantage of using qualitative methods in this study, conducting focus groups, allowed respondents to answer questions in their own words, rather than having to choose from fixed responses, as quantitative methods do. Six overarching

themes captured respondents' feelings and attitudes toward working with students with mental health concerns, and also highlight other barriers in the target school that contribute to the problem of practice. Selected quotations that are illustrative of each theme are presented below.

Professional development was "liked" and "useful"

Six (75%) focus group respondents reported they "liked" the professional development, and four (50%) respondents reported the information from the professional development was "useful" in their professional context. This data supports **Hypothesis 5: The proposed intervention would improve school personnel's knowledge and attitude toward students with mental health concerns.**

Pressure on school personnel to address only academic issues in school

All (100%) focus group respondents reported being "under pressure" or "there is a lot of pressure" to graduate students, and focusing on resolving academic issues, and never addressing mental health issues in students.

All (100%) respondents reported having "no time," "there's not much time," or "I can't even finish my lesson plans" during the school day, to focus on issues other than academic ones in students.

Teachers did not know the procedure to assist students with mental health concerns

Four (50%) respondents who are teachers reported they did not know the school's procedure to assist students with mental health concerns. Four (50%) respondents (two Social Workers and two Counselors) reported they did know the school's procedure to assist students with mental health concerns, and one (13%) school Social Worker respondent stated "… it's really hard to get that student's parent on board with recommendations".

Teachers and school counseling professionals do not receive training on early detection

of student mental health concerns

One (13%) school counselor respondent reported her "biggest challenge" is not knowing when to refer students out to appropriate treatment services. Two (25%) school Social Worker respondents further stated they felt they needed clinical training to help students with mental health conditions. One (13%) school Counselor stated, "We get training on bullying and how to manage conduct disorder, but nothing too clinical." This data provides evidence supporting **Hypothesis 2: school personnel are not recognizing symptoms of mental illness in students.** Four (50%) respondents (two teachers and two Social Workers) expressed the need for new counselors, new teachers, and teacher fellowships to participate in the administered professional development. One teacher respondent stated, "It's really important you get this information out to the pre-service teachers and fellowships…I learned a lot in the PD, the stats were eye-opening, I didn't know I could do something to help my student who's going through mental health challenges." Another teacher respondent stated, "I think it's important to get this PD early on so you already know what to watch out for. When you see students struggle, you don't automatically assume it's an academic issue, but that they need medical help". This data provides additional evidence to support **Hypothesis 1: Pre-service school personnel and school personnel do not receive or receive limited training on how to assist students with mental health concerns.**

Ongoing training is necessary

Two (25%) teacher respondents expressed the professional development should be provided on a long-term basis. One teacher respondent stated, "I think we need to get more PDs on these issues. I don't think one time training will change how we do things here." Another teacher respondent stated, "I feel like I'm just learning about how important it is to support my

student in this way, so I need to learn more about how to do this."

Low parental participation

All (100%) respondents also reported low parental participation in school as an underlying factor to the problem of practice. One teacher respondent stated, "Our parents here can't afford to miss a day or few hours of work time, so they don't come in for parent teacher conferences, or requested meetings". Another teacher respondent stated, "I would love to see more parents at PTA meetings, but we only have one or two parents show up every time". This data provides evidence for **Hypothesis 3: school personnel are not informing and facilitating communication with parents to discuss mental health concerns.** However, this data also reveals additional findings in that low parental participation in the current educational context contributes to the complexity of the existing problem of practice.

For research question 2: What are the barriers in establishing collaborations with schools in New York City? The author gained deeper understanding of this research question in this dissertation study. The author encountered significant delays in obtaining approval from New York City Department of Education Institutional Review Board, and also restrictions to recruitment method. The author was not allowed to attend staff meetings or PTA meeting at the target school, to conduct additional needs assessments and gain support from school staff and parents. The approved method of recruitment was posting recruitment flyers in the staff lounge at the target school. Compounded with the procedural delays from the respective Institutional Review Boards, this impacted recruitment significantly, and the author was unable to recruit the target number of respondents.

For research question 3: Would providing training in early detection of mental illness in students to teachers and school personnel affect their attitude on assisting students with mental

health issues and participation in continuing training? The quantitative and qualitative data sets both provided good insight into this research question and evidence supporting **Hypothesis 4: The proposed intervention would improve school personnel's knowledge and attitude toward students with mental health concerns.** The quantitative data from this study demonstrated that the teachers' attitudes towards helping students with mental illness improved positively after the intervention. In addition, respondents were influenced by the intervention, and were more willing to participate in additional professional development on early detection of students mental health concerns, after the intervention. The qualitative data from this study further informed this research question because focus group respondents stated they enjoyed the intervention, and found information from the intervention helpful to their professional context. Other findings include the lack of clinical counseling staff, namely, only one school Psychologist was supporting five high schools. This supports literature review and published data on lack of mental health professionals in secondary school settings (Green et al., 2013; Dahir & Stone, 2009; Anderson & Cardoza, 2016).

Discussion and Conclusions

The quantitative data from this dissertation study strongly suggests that the respondents' attitudes were indeed influenced by the intervention, and they were more willing to participate in additional professional development on early detection of students mental health concerns, after the intervention. In addition, teachers' attitudes towards assisting students with mental health concerns, also improved, in the post-professional development responses.

The qualitative data from this dissertation study indicates there is a tremendous need for counseling leadership and supervision in schools. In this case, school counseling professionals (i.e., counselors and social workers) reported they were aware there is a procedure to refer

students with mental health concerns to appropriate treatment, while teachers were not familiar with this procedure. This is an opportunity to employ a peer training and coaching model such as a Train-the-Trainer model in the target school, so that school counseling professionals who will complete additional clinical professional developments can disseminate training materials to their colleagues (teachers and other school personnel) at individual school sites (Holcomb-McCoy, Gonzalez & Johnston, 2009; Thorning et al., 2012). It would also be important to develop and implement a Professional Learning Community (PLC) at individual school sites, as well as an interdisciplinary School Counseling Collaborative Team (SCCT) for the target school community.

Limitations

The author encountered significant delays in obtaining approval from the New York City Department of Education Institutional Review Board and the Johns Hopkins University Homewood Institutional Review Board. In addition, due to the New York City Department of Education's Institutional Review Board's restrictions, the author was not allowed to attend staff meetings or PTA meeting at the target school, to conduct additional needs assessments and gain support from school staff and parents. The approved method of recruitment was posting recruitment flyers in the staff lounge at the target school. Compounded with the procedural delays from respective Institutional Review Boards, this impacted recruitment significantly, and the author was unable to recruit the target number of desired respondents. The limitations and disadvantages of utilizing both the survey instrument and focus groups should be noted. The disadvantage of using a survey instrument include: 1) poor measurement, 2) nonresponse, 3) inadequate coverage of the population, and 4) sampling error (Schutt, 2012). The disadvantage of using the focus group method are participants can portray themselves as "thoughtful, rational and

reflective individuals," and it is easy for them to "intellectualize and give well-meaning answers" (Krueger & Casey, 2009, p. 13). Some participants may be reluctant to share their thoughts and feelings for other reasons, may make up answers if they believe their answers are embarrassing, reflect negatively upon themselves, or give more socially desirable answers (Krueger & Casey, 2009).

Caution should be given to the generalizability of this study's findings for several reasons: (1) lack of existing instruments that measure school personnel's knowledge and attitude toward working with students with mental health concerns, (2) the small sample size, and (3) sample from the same school. It is rare for a public school in New York City to have two counseling professionals (one Counselor and one Social Worker) per grade. Many public schools in New York City have only one counseling professional for the entire student body.

Implications for Research

This dissertation research study examined identified factors contributing to the non-treatment and under-treatment of mental illness in youth. Though this study is small and requires replication, the findings from administering a professional development on early detection of mental health concerns in students; effective communication strategies with parents; introducing a peer coaching model; establishing Professional Learning Communities and School Counseling Collaborative Team in target school community; as well as external psychiatric treatment resources to school personnel, showed promise in improving school personnel's attitudes toward assisting students with mental health needs. Future research should also include students' and families' perspectives, which would enrich and contribute to deeper understanding of the existing problem of practice. Additionally, these findings offer important insight into the complexities of bridging the gap between healthcare and educational institutions. Current

priorities include: 1) closing the existing gap between policy, research, and practice in the education and healthcare landscape, and 2) identifying local, state, and federal stakeholders to improve policy in school-based mental health services and resources. Finally, identifying funding streams to implement research studies in finding sustainable solutions to issues in school-based mental health system is an urgent next step. Research scientists in both healthcare and education must also collaborate efforts to develop more studies that identify barriers that prevent at risk students in obtaining appropriate treatment at the onset of symptoms, and implement solutions that address these issues in their nascent stages.

Implications for Practice

In spite of these limitations, this dissertation study and administered intervention, showed promise in improving school personnel's attitudes, which can lead to improved self-efficacy, toward assisting students with mental health concerns, and knowledge of external treatment resources. The larger aim of this study was to facilitate critical collaborations between the target high school's personnel, parents, and external specialized psychiatric treatment facilities in New York City. By providing the target population knowledge of common psychiatric disorders in youth, communication strategies on how to discuss mental health concerns in students with parents, creating a peer coaching – Train-the-Trainer model (Holcomb-McCoy, Gonzalez & Johnston, 2009; Thorning et al., 2012; Loucks-Horsley et al., 1998), as well as developing a Professional Learning Community and School Counseling Collaborative Team, and information about specialized treatment facilities in New York City, the author's intended outcomes are: 1) short term: school personnel will increase their knowledge of early signs of mental illness in youth, external psychiatric treatment resources, and develop effective communication strategies in addressing mental health concerns with parents, 2) medium term: school counseling

professionals participate in on-going clinical professional development and disseminate training materials to their colleagues. Professional Learning Communities and School Counseling Collaborative Teams are created. School personnel become more adept in addressing mental health concerns with parents of affected students, obtain consents from parents for referrals, and connect affected students to appropriate early intervention treatment services at the onset of symptoms. School administrative teams will develop internal procedures to ensure successful implementation and provide support for the delivery of this initiative; 3) long term: evaluate the efficacy of this intervention, and establish state policy to replicate, and disseminate these services and proposed peer coaching – Train-the-Trainer model to secondary schools and higher education institutions statewide.

Additionally, incorporating innovative educational technology strategies to record this intervention as a webinar, or to develop an app, are options to consider. Technology would reduce barriers in participating and receiving this information, and make the professional development more accessible to school personnel and families who are unable to attend the in-person trainings. Finally, the author will continue to work with her institutional stakeholders, as well as affiliated city, state, and federal agencies in the current professional context, in advocacy efforts with education stakeholders and policy authorities. Gaining support from Mayor Bill De Blasio, the New York City Department of Education administration, and district leaders in mental health, will be critical in implementing this intervention on a macro scale in New York City secondary schools.

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Risk Factors

- Personal or family history of depression
- Major life changes, trauma, or stress
- Certain physical illnesses and medications

Signs and Symptoms of Major Depressive Disorder

- Persistent sad, anxious, or "empty" mood
- Feelings of hopelessness, or pessimism
- Irritability
- Feelings of guilt, worthlessness or helplessness
- Loss of interest or pleasure in hobbies and activities
- Decreased energy or fatigue
- Moving or talking more slowly
- Feeling restless or having trouble sitting still
- Difficulty concentrating, remembering, or making decisions
- Difficulty sleeping, early-morning awakening, or oversleeping
- Appetite and/or weight changes
- Thoughts of death or suicide, or suicide attempts
- Aches or pains, headaches, cramps, or digestive problems without a clear physical cause and/or that do not ease even with treatment

Evidence-Based Treatment Model: OnTrackNY

•**What is it?**

- Coordinated Specialty Care program
- Informed by research studies funded by the federal government which demonstrated good outcomes for people with First Episode Psychosis (FEP)
- RA1SE : *The "Recovery After an Initial Schizophrenia Episode" was the National Institute of Mental Health's initiative seeking to fundamentally alter the trajectory and prognosis of schizophrenia through coordinated and aggressive treatment in the earliest stages of illness.*

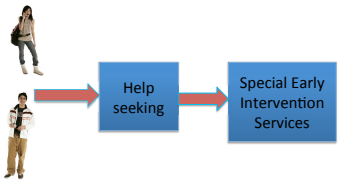
OnTrackNY
My health. My choices. My future.

Goal

•Provide Early Intervention Services to promote long-term recovery and reduce disability

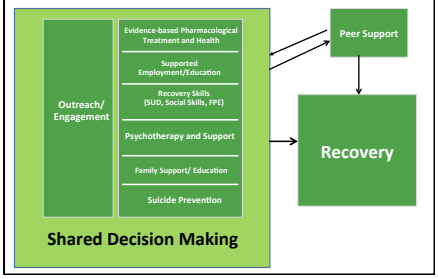
OnTrackNY
My health. My choices. My future.

Goal



OnTrackNY
My health. My choices. My future.

OnTrackNY Team Intervention



Evidence-based Interventions

Services provided will be based on individual needs and preferences

- FEP-relevant illness management/ coping strategies
- Medication
- Education/Employment
- Substance Abuse
- Family Support
- Suicide Prevention
- Social Skills Training (individual and group)
- Physical Health
- Trauma
- Income
- Housing

OnTrackNY
My health. My choices. My future.

Family Support and Intervention

- Right level of family involvement in all aspects of treatment, consistent with client and family preferences
- Services include initial outreach and engagement efforts and a detailed assessment of the client and family needs
- PC encourages family involvement in treatment planning, treatment decisions, and ongoing care and assists family members in forging a collaborative relationship with the treatment team
- Families offered more formal services, including family psychoeducation and consultation

OnTrackNY
My health. My choices. My future.

Shared Decision Making (SDM)

- In the SDM process, there are two sets of experts in the room:
  - The school staff member is knowledgeable in early detection of mental health concerns in students;
  - the student and family/primary support member seeking support services are experts in what matters in their lives

(Deegan and Drake, 2006)

- Educational and Treatment planning with the student and family member may include:
  - outlining options
  - considering pros and cons of options
  - expressing values and preferences
  - clarifying disagreements
  - reaching compromises

Shared Decision Making (SDM)

- Begin by communicating the expectation that students and their families (or supporters) will routinely be involved in shared decision making.
- School staff on the team must be trained in shared decision making.
- Put together a library of decision aids for easy access.
- Talk about how shared decision making can happen within your school's procedure.

How To:

Choices talk	Options talk	Decision talk
• Making sure that families know that reasonable options exist	• Provide more detailed information on options	• Considering preferences and deciding what's best

Encourage colleagues to involve family members in the decision-making process

SDM: Starting the Conversation

- "I am so glad you are letting me know about what is going on with your child."
  - Provide positive reinforcement for parents/ caregivers raising concerns
- "Can you tell me more about what you are seeing at home? How has your child's mood and/or behavior changed? Has these changes impacted his/her functioning?"

SDM: Starting the Conversation

- "What is important to you? What are your goals and priorities for your child? What would you like help with?"
  - Elicit goals and preferences
  - Develop shared language

SDM: Starting the Conversation

- "How can I/school help you?"
  - Benefits
  - Existing barriers
  - Concerns

SDM: Choices Talk

•"I want you to know that there are free and low-cost specialized treatment services in New York City, where your child will get the right treatment he/she needs":

- Provide psychoeducation on early intervention of mental health disorders: emphasize the importance/urgency of connecting to treatment at onset of symptoms
- Provide your/school's observation of the student's symptoms

SDM: Options Talk

•Let's review the pros and cons of each option:

- Consider and discuss each option,
- Provide information in usable, understandable format
- Use decision aides when possible

SDM: Decision Talk

- Let's think together about how these options might fit into your goals and priorities for your child.
- Is there anyone else you'd like to involve in the decision about referring your child to treatment– maybe we can meet together with your child to discuss these options?

Decisional balance worksheet

	Getting Treatment	Not getting treatment
Pros	• Improvement in my child's mood, behavior and functioning • Improvement in relationships with family members and peers • Staying in school • Avoid hospitalization and reduce chance of developing chronic condition	• Do not need to change work schedule or miss work
Cons	• Need to adjust work schedule to take my child to treatment	• My child's emotional, physical, and academic functioning will continue to decline • Risk of hospitalization • Continued family conflict

Recovery Plan


My Recovery Plan

Name:

My triggers are:

My early warning signs are:

When I have any of these early warning signs, I will do the following:

Safety Plan

Social Justice Advocacy and Competence

- Participate in social justice pedagogy
- Allows the classroom to be transformed as "life-sustaining and mind-expanding, a place of liberating mutuality where teacher and student together work in partnership" (Brubaker et al., 2010, p.89).
- Create educational settings that are fair and affirming
- Take a stand on social justice for your students

Social Justice Advocacy and Competence

- School staff "to connect human development with toxic environmental conditions" and recognizing the "inextricable link between mental health issues and social injustices" (Ratts, 2009).
- School counseling leaders to become "key players in education reform and in fostering positive student achievement outcomes" because school counseling leaders "are culturally responsive change agents who integrate school counseling best practices to initiate, develop and implement equitable services and interventions for all students" (Young & Bryan, 2015, p. 2).

Professional Learning Community

- 1) Shared mission, vision, values, and goals,
- 2) collaborative teams that share a common purpose, create momentum, and drive improvement,
- 3) collective inquiry,
- 4) action orientation,
- 5) commitment to continuous improvement,
- 6) results orientation

School Counseling Collaborative Teams

- Interpersonal influence,
- systemic collaboration,
- resourceful problem solving,
- professional efficacy,
- and social justice advocacy (Young & Bryan, 2015, p. 10).

Specialized Treatment Services for First Episode Psychosis

OnTrackNY

- Contact: Nannan Liu, Program Director
- Phone: 646-774-8425
- New York State Psychiatric Institute/Columbia University Medical Center

PEER Program

- Contact: Intake Department
- Phone: 212-523-3082
- Mt. Sinai St. Luke's Hospital
- 411 West 114th Street,
- New York, NY 10025

Specialized Treatment Services for Mood Disorders, Substance Use, Eating Disorders, Personality Disorders, PTSD

Northside Center for Child Development

- Contact: Intake Department
- Phone: 646-259-2008
- Address: 35 E. 110 St., New York, NY 10029
- Email: fwilliams@northsidecenter.org

Mount Sinai Adolescent Health Center

- Contact: Intake Department
- Phone: 212-423-3000
- Address: 312-320 East 94th Street
- New York, NY 10128

Specialized Treatment Services Therapeutic Schools

Children's Day Unit

- Contact: Mara Eilenberg, Clinical Director
- Phone: 646-774-5766
- New York State Psychiatric Institute/Columbia University Medical Center
- 1051 Riverside Drive, New York, NY 10032

CARES Program

- Contact: Intake Department
- Phone: 212-523-3083
- Mt. Sinai St. Luke's Hospital
- 411 West 114th Street, 2nd Floor
- New York, NY 10025

Discussion

Thank You!

Appendix B

Department of Education

Carmen Fariña, Chancellor Research and Policy Support Group

52 Chambers Street Room 310 New York, NY 10007

November 30, 2016

Ms. Nannan Liu

150 Myrtle Avenue, 3607 Brooklyn, NY 11201

Dear Ms. Liu:

I am happy to inform you that the New York City Department of Education Institutional Review Board (NYCDOE IRB) has approved your research proposal, "Building the link between healthcare and education: A professional development to address the disparities in school-based mental health services." The NYCDOE IRB has assigned your study the file number of 1502. Please make certain that all correspondence regarding this project references this number. The IRB has determined that the study poses minimal risk to participants. The approval is for a period of one year:

Approval Date: November 30, 2016 Expiration Date: November 29, 2017

Responsibilities of Principal Investigators: Please find below a list of responsibilities of Principal Investigators who have DOE IRB approval to conduct research in New York City public schools.

- Approval by this office does not guarantee access to any particular school, individual or data. You are responsible for making appropriate contacts and getting the required permissions and consents before initiating the study.

- When requesting permission to conduct research, submit a letter to the school principal summarizing your research design and methodology along with this IRB Approval letter. Each principal agreeing to participate must sign the enclosed Approval to Conduct Research in Schools/Districts form. *A completed and signed form for every school included in your research must be emailed to* IRB@schools.nyc.gov . Principals may also ask you to show them the receipt issued by the NYC

Department of Education at the time of your fingerprinting.

- You are responsible for ensuring that all researchers on your team conducting research in NYC public schools are fingerprinted by the NYC Department of Education. Please note: This rule applies to all research in schools conducted with students and/or staff. See the attached fingerprinting materials. For additional information click here. Fingerprinting staff will ask you for your identification and social security number and for your DOE IRB approval letter. You must be fingerprinted during the school year in which the letter is issued. Researchers who join the study team after the inception of the research must also be fingerprinted. Please provide a list of their names and social security numbers to the NYC Department of Education Research and Policy Support Group for tracking their eligibility and security clearance. The cost of fingerprinting is $135. *A copy of the fingerprinting receipt must be emailed to* IRB@schools.nyc.gov .

You are responsible for ensuring that the research is conducted in accordance with your research proposal as approved by the DOE IRB and for the actions of all co- investigators and research staff involved with the research. You are responsible for informing all participants (e.g., administrators, teachers, parents, and students) that their participation is strictly voluntary and that there are no consequences for non-participation or withdrawal at any time during the study. Researchers must: use the consent forms approved by the DOE IRB; provide all research subjects with copies of their signed forms; maintain signed forms in a secure place for a period of at least three years after study completion; and destroy the forms in accordance with the data disposal plan approved by the IRB.

Mandatory Reporting to the IRB: The principal investigator must report to the Research and Policy Support Group, within five business days, any serious problem, adverse effect, or outcome that occurs with frequency or degree of severity greater than that anticipated. In addition, the principal investigator must report any event or series of events that prompt the temporary or permanent suspension of a research project involving human subjects or any deviations from the approved protocol.

Amendments/Modifications: All amendments/modification of protocols involving human subjects must have prior IRB approval, except those involving the prevention of immediate harm to a subject, which must be reported within 24 hours to the NYC Department of Education IRB.

Continuation of your research: It is your responsibility to insure that an application for

continuing review approval is submitted six weeks before the expiration date noted above. If you do not receive approval before the expiration date, all study activities must stop until you receive a new approval letter.

Research findings: We require a copy of the report of findings from the research. Interim reports may also be requested for multi-year studies. Your report should not include identification of the superintendency, district, any school, student, or staff member. Please send an electronic copy of the final report to: irb@schools.nyc.gov.

If you have any questions, please contact Dr. Mary Mattis at 212.374.3913. Good luck with your research. Sincerely,

Mary C. Mattis, PhD Director, Institutional Review Board

cc: Barbara Dworkowitz

Appendix C

JOHNS HOPKINS
U N I V E R S I T Y

Homewood Institutional Review Board
3400 N. Charles Street
Baltimore MD 21218-2685
410-516-6580
http://web.jhu.edu/Homewood-IRB/

Michael McCloskey, PhD
Chair

Date: December 19, 2016

PI Name: Donald Nowak
Study #: HIRB00004994
Study Name: Building the link between healthcare and education: A professional development to address the disparities in school-based mental health services in New York City

Date of Review: 12/19/2016
Date of Approval: 12/19/2016
Expiration Date: 12/19/2019

The above referenced study has been *approved*.

Review Type:	Exempt
Funding Agency:	Not funded
Grant or Contract Number:	
International Sites:	No
Maximum number of participants:	50
Vulnerable populations:	None
Consent process:	Written Informed Consent
Assent Process:	

Please keep in mind that it is your responsibility to inform the HIRB of any adverse consequences to participants that occur in the course of the study, as well

as any complaints from participants regarding the research. In conducting this research, you are required to follow the requirements listed in the *HIRB Policies and Procedures Manual.*

Approved Documents:

Written Consents:
Consent form.docx

Recruiting Materials:
School staff recruitment flyer.docx

Study Team Members:
Nannan Liu

APPROVAL IS GRANTED UNDER THE TERMS OF **FWA00005834** FEDERAL-WIDE ASSURANCE OF COMPLIANCE WITH DHHS REGULATIONS FOR PROTECTION OF HUMAN RESEARCH SUBJECTS

Appendix D

Demographics Information (Please circle one answer):

1) What is your age?

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75 years or older

2) Race/Ethnicity:

- Black or African American
- Asian
- Native Hawaiian or other Pacific Islander
- White
- Hispanic or Latino
- American Indian or Alaska Native
- Other (specify)
-

3) Gender:

- Male
- Female

4) Current position:

- Administrator
- School counselor or social worker
- Professor
- Teacher
- Staff
- Other (specify)

5) Current work setting:

- Elementary School
- Middle School
- High School

- Community College
- College
- University
- Other (specify):_____

6) Type of work setting:
- Public School
- Charter School
- Private School
- Other (specify):_____

7) Education: What is the highest degree or level of school you have completed? *If currently enrolled, highest degree received.*

- Some high school, no diploma
- High school graduate, diploma or the equivalent (for example: GED)
- Some college credit, no degree
- Trade/technical/vocational training
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree

You will probably find that you agree with some of the statements, and disagree with others, to varying extents. Please indicate your reaction to each statement according to the following scale. Counseling staff includes school counselors and school social workers.

1. Professional development in early detection for mental illness in students is provided to counseling staff in my school.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

2. Professional development in early detection for mental illness in students is provided to teachers in my school.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

3. My school's leadership team is knowledgeable in early detection for mental illness in students.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

4. My school's leadership team is interested in assisting students with mental health concerns.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

5. My school's counseling staff is interested in assisting students with mental health concerns.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

6. Teachers in my school are interested in assisting students with mental health concerns.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

7. My school's counseling staff can effectively manage and address our students' mental health needs.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

8. In my school, teachers collaborate with school counseling staff in assisting students with mental health concerns.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

9. My school collaborates with students' families to address students' mental health concerns.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

10. Our school has a procedure to refer students for appropriate psychiatric treatment services.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

11. Our school refers students with mental illness to appropriate psychiatric treatment services.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

12. Our leadership team knows external psychiatric treatment services and resources.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

13. Our counseling staff knows external psychiatric treatment services and resources.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

14. Our teachers know external psychiatric treatment services and resources.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

15. I would definitely participate in a clinical training on common psychiatric disorders in youth if provided.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

Appendix E

FOCUS GROUP QUESTIONS

1. How do you feel about working with students experiencing signs of mental illness?

2. What are the barriers in working with students experiencing signs of mental illness?

3.What are the resources at your school in serving students experiencing signs of mental illness?

4. What are the procedures, if any, when students are identified as experiencing signs of mental illness?

5. Do you feel there are adequate counseling resources at your school in serving students experiencing signs of mental illness? What changes, if any, would you recommend?
6. How do you feel about collaborating with colleagues in assisting students experiencing signs of mental illness?
7. How does your school leadership team work with students experiencing signs of mental illness?
8. How was your experience participating in the professional development on early detection of mental health concerns in students and receiving external psychiatric treatment resources for students?
9. Has your experience from the professional development impacted your feelings and actions towards working with students experiencing signs of mental illness in any way? Why or why not?

10. How do you feel about participating in additional training in working with students with mental health concerns? How do you feel about working with students experiencing signs of mental illness?

Appendix F

PARTICIPANT CONSENT FORM

Johns Hopkins University

School Personnel Informed Consent

Title: Building the Link Between Healthcare and Education: A Professional Development to Address the Disparities in School-Based Mental Health Services in New York City Principal Investigator: Dr. Donald Nowak, School of Education
Date: October 2, 2016

PURPOSE OF RESEARCH STUDY:

The purpose of this research study is to determine whether a professional development in early detection of mental illness in youth and external psychiatric treatment resources, provided to school personnel will improve school personnel's clinical knowledge of mental illness in youth, and improve their self-efficacy in working with students experiencing signs of mental illness.

PROCEDURES: There will be several components for this study:

1. School personnel will be provided a professional development on early detection of mental illness in youth, and external psychiatric treatment resources in New York City.
2. School personnel will be asked to complete two brief surveys during the school year.
    1. School Personnel Knowledge and Attitude in Early Detection of Student Mental Health Concerns, pre- professional development.
    2. School Personnel Knowledge and Attitude in Early Detection of Student Mental Health Concerns, post- professional development.
3. School personnel will be asked to participate in a focus group post- professional development. The focus group will be audio taped. The audio tape recording will be destroyed immediately, after transcription. Participants will be de-identified, by assigned a number in the transcript. The transcript, along will other study data will kept in a locked room, which can be accessed by only the Student Investigator and Principal Investigator.
4. Time required: School personnel will be asked to participate in this study for 1 school year. The pre-professional development survey will be completed during the Fall of 2016, and the post-professional development survey will be completed during Winter of 2016. The focus group will be conducted during the Winter of 2016. The professional development and focus group will take place at the Facing History High School, during after school hours. The participant time commitment for the professional development will be 2 hours. Participation in the focus group will be an additional 1-hour time commitment.

RISKS/DISCOMFORTS:

There are no anticipated risks to school personnel.

Title: Building the Link Between Healthcare and Education: A Professional Development to Address the Disparities in School-Based Mental Health Services in New York City Principal Investigator: Dr. Donald Nowak, School of Education
Date: October 2, 2016

BENEFITS:

Potential benefits are school personnel's increased clinical knowledge and understanding of mental health needs in students. It is believed that school personnel who receive the proposed professional development in early detection of mental illness in youth, will improve self-efficacy in assisting affected students, and be able to connect at risk students to appropriate treatment at the onset of symptoms. This critical time intervention will reduce the duration of untreated mental illness, thus significantly improving students' treatment outcome. School personnel will gain these benefits from participating in the professional development, even if they choose not to complete the surveys and/or participate in the focus group.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary. You choose to participate in the study. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

You can stop participation in the study at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please contact Nannan Liu via phone or email: (212) 217-9850, nliu12@jhu.edu.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. All study measures will be examined by the Principal Investigator and research affiliates only (including those entities described above). No identifiable information will be included in any reports of the research published or provided to school administration. A participant number will be assigned to all surveys and focus group transcript.

Title: Building the Link Between Healthcare and Education: A Professional Development to Address the Disparities in School-Based Mental Health Services in New York City Principal Investigator: Dr. Donald Nowak, School of Education
Date: October 2, 2016

Surveys will be collected in paper format. Focus group will be audio taped. These data will not include identifiable information.

All research data including paper surveys will be kept in a locked office. Electronic data will be stored on the PI's computer, which is password protected. Any electronic files will be erased, paper documents shredded, audio tape will be destroyed, three years after collection.

Only group data will be included in publication; no individual data will ever be published.

COMPENSATION:

None

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research study at any time during the study by contacting Nannan Liu via phone or email: (212) 217-9850, nliu12@jhu.edu.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form.

By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

☐ **I agree to be audiotaped for the focus group**

_____

Participant's Name

_____

Participant's Signature Date

_____

Signature of Person Obtaining Consent Date (Investigator or HIRB-Approved Designee)

Biographical Sketch

Ms. Nannan Liu is an experienced clinician with nine years of senior management and supervisory experience. Currently, Ms. Liu is the Program Director of the OnTrackNY/WHCS (First Episode Psychosis) Clinic at the New York State Psychiatric Institute and Columbia University Medical Center. OnTrackNY is an innovative, evidence-based treatment model, to providing recovery-oriented treatment to adolescents and young people (age 16-30) who have recently begun experiencing psychotic symptoms. The multi-disciplinary team-based Coordinated Specialty Care (CSC) model integrates psychiatric care and medication, psychosocial therapies and skills training, suicide prevention, family psycho-education and support, rehabilitation services, supported education and employment, trauma and peer informed services, all aimed at promoting symptom reduction and improving life functioning. The OnTrackNY/WHCS Clinic is recipient of American Psychiatric Association's Psychiatric Services Achievement Silver Award for 2016-2017. Ms. Liu has been interviewed by the Mental Health Channel and Huffington Post, and invited to speak at state, national, and international conferences, about evidenced-based, person-centered, and recovery-oriented approach to treating first episode psychosis. These include New York Association of Psychiatric Rehabilitation Services Annual Conference, Tennessee System of Care Annual Conference, and the International Symposium in Early Intervention for Psychosis in South Korea.

In her current professional role, Ms. Liu oversees the clinical and operational needs of the OnTrackNY/WHCS clinic, and provides clinical supervision to the entire treatment team. Treatment team includes psychiatrists, resident psychiatrists, clinical psychologists, mental health counselors, social workers, nurse, peer specialist, and trainees. In addition, Ms. Liu is involved in administrative responsibilities, including managing program budget, hiring staff, program development and works closely with federal (National Institute of Mental Health, Substance Abuse and Mental Health Services Administration, and the United States Department of Health and Human Services), and state (New York State Office of Mental Health) stakeholders to ensure program fidelity, and on research initiatives.

Ms. Liu is passionate about education equality and mental health advocacy. Prior to joining the OnTrackNY/WHCS team, Ms. Liu developed and directed community mental health programs in New York City, serving the most underserved, and marginalized client populations with serious and persistent mental illness. Ms. Liu volunteers her time to provide free consultations, psychoeducation, and resources to New York City secondary and higher education institutions, and community agencies.

Ms. Liu is a New York State Licensed Mental Health Counselor, and is on the Executive Leadership Board of the American Counseling Association – New York Chapter. She is also a member of the American Mental Health Counselors Association and New York Coalition for Asian American Mental Health. Ms. Liu received a Master's degree in Counseling Psychology

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